FRUITYLOOPS 3

GETTING STARTED

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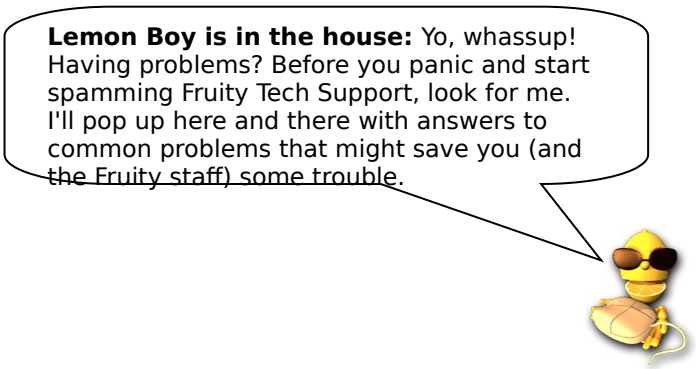

Lemon Boy is in the house: Yo, whassup! Having problems? Before you panic and start spamming Fruity Tech Support, look for me. I'll pop up here and there with answers to common problems that might save you (and the Fruity staff) some trouble.

FOR FRUITY LOOPS 2.x USERS

If you were the proud owner of one of the version 2 releases of Fruity Loops (good for you!) then read on to see what's new in version 3.

1. **New Layout.** Yeah, it looks pretty different, but all the stuff you remember is still in there. Now everything's inside one big window.

2. **Piano Roll.** Now you can compose full polyphonic melodies without having to use multiple patterns. Plus, the Piano Roll contains support for note slides (pitch bending) and arpeggios! See the *Piano Roll* section of this guide and the on-line help for more info.

3. **Synth Plugins Now Supported.** Now you can download synthesizer plugins and use them live right in your song. Plus there's an awesome new array of synths built right in! See the *Generators* section of this guide and the on-line help for more info.

4. **Events Now Stored in Patterns.** In previous releases, you only had one global track of events. Every control had one Event Editor only. Now every control has one Event Editor per pattern, and you have to drop a pattern into the playlist to get the events on that pattern to take effect. This could cause some confusion, so you better take some time to wrap your head around it. The big advantage is that you can now set up the effect changes you want and then repeat them or move them around in the song. See the *Live Recording* section of this guide and the on-line help for more info.

5. **New FX Tracks.** There are now 16 FX Tracks instead of 8, but even better, there are 2 new Send FX Tracks. Now you can put the same reverb on two different FX Tracks without having to use the reverb plugin twice. See the *Fruity Effects* section of this guide and the on-line help for more info.

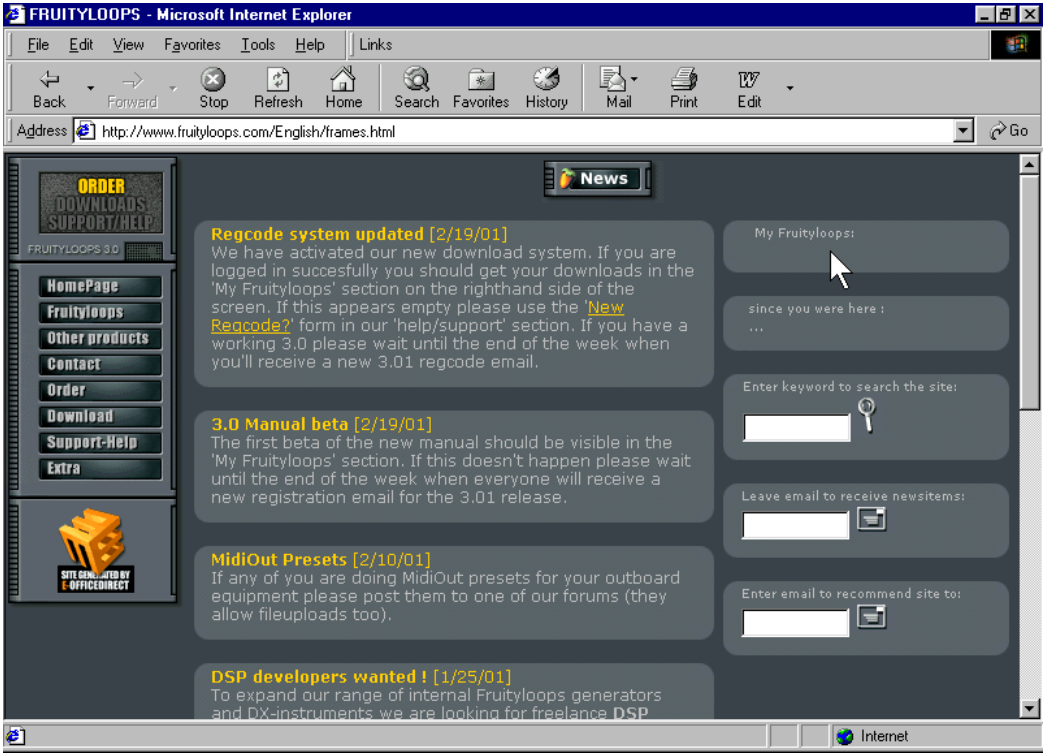
6. **Plus Much Much More.** Check out the WhatsNew.doc in the main Fruity Loops directory for a brief run down of what else is new.

INSTALL *THIS*

If you bought your copy of Fruity Loops on line, here's what you do.

1. **Wait for the E-Mail.** The Fruity team will send you an e-mail containing a special WebLogin URL (web address). The e-mail will also contain a **Registration Key** file with a strange name and a ".key" extension.

2. **Go to the Web Site.** Use the WebLogin link to get to the Fruity Loops 3 web site. You will be automatically registered on the site and you'll be sent to the "News" page shown below.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Back Forward Stop Refresh Home Search Favorites History Mail Print Edit
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ORDER
DOWNLOADS
SUPPORT/HELP
FRUITYLOOPS 3.0
HomePage
Fruityloops
Other products
Contact
Order
Download
Support-Help
Extra
News
Regcode system updated [2/19/01]
We have activated our new download system. If you are logged in succesfully you should get your downloads in the 'My Fruityloops' section on the righthand side of the screen. If this appears empty please use the 'New Regcode?' form in our 'help/support' section. If you have a working 3.0 please wait until the end of the week when you'll receive a new 3.01 regcode email.
3.0 Manual beta [2/19/01]
The first beta of the new manual should be visible in the 'My Fruityloops' section. If this doesn't happen please wait until the end of the week when everyone will receive a new registration email for the 3.01 release.
MidiOut Presets [2/10/01]
If any of you are doing MidiOut presets for your outboard equipment please post them to one of our forums (they allow fileuploads too).
DSP developers wanted ! [1/25/01]
To expand our range of internal Fruityloops generators and DX-instruments we are looking for freelance DSP
My Fruityloops:
since you were here :
...
Enter keyword to search the site:
Leave email to receive newsitems:
Enter email to recommend site to:
Internet

3. **Download the Installation Program.** In the "My Fruityloops" section of the page (indicated by the arrow above) you should see your personal link to download the Fruity Loops 3 installation program.

4. **Run the Installation Program.** It's pretty simple. **Double-click** the file you just downloaded and it will run. The only thing you have to do is choose a folder for Fruity Loops 3 and then wait while everything gets unpacked. If you don't have any opinion on where Fruity Loops 3 should go, use the default, but make a note of it so you can find it later.

5. **Save the Registration Key.** Go back to the e-mail and save the ".key" file to the same folder you just installed Fruity Loops to.

6. **Register Fruity Loops 3.** Surf to the Fruity Loops 3 directory, and **double-click** the ".key" file you just saved there. You should get a message saying that your Windows registry has been updated. If it doesn't seem to work, rename the file to give it a ".reg" extension and try again.

7. **Run the Program.** Go to **Start → Programs → Fruity Loops 3** and run Fruity Loops!

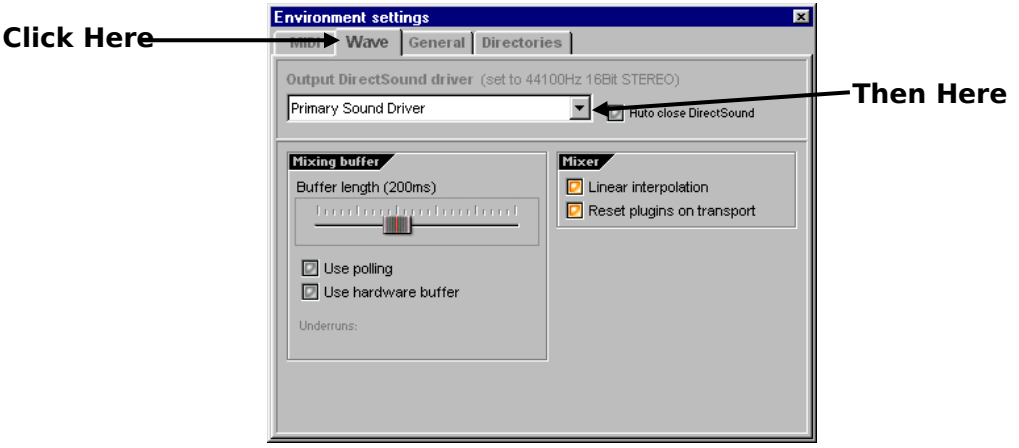
8. **Bookmark the Web Site.** The Fruity Loops web site is an awesome resource. Check back at **www.fruityloops.com** often to see what's up.

9. **Read this Guide.** As soon as you start Fruity, you'll be confronted with strange dialog boxes and messages. Proceed to the next section of this guide to find out what to do next.

WHAT ARE YOU LOOKIN' AT?

OK, so you just finished the installation and started Fruity. Read this section for an explanation of what you're seeing.

1. **The Environment Settings Screen.** When you first run Fruity loops, you may be confronted with a dialog box like the one below. You just have to use the select boxes to choose your sound card and MIDI drivers. At first, you'll be looking at the MIDI screen, but for now the most important one is the WAVE screen, shown below.

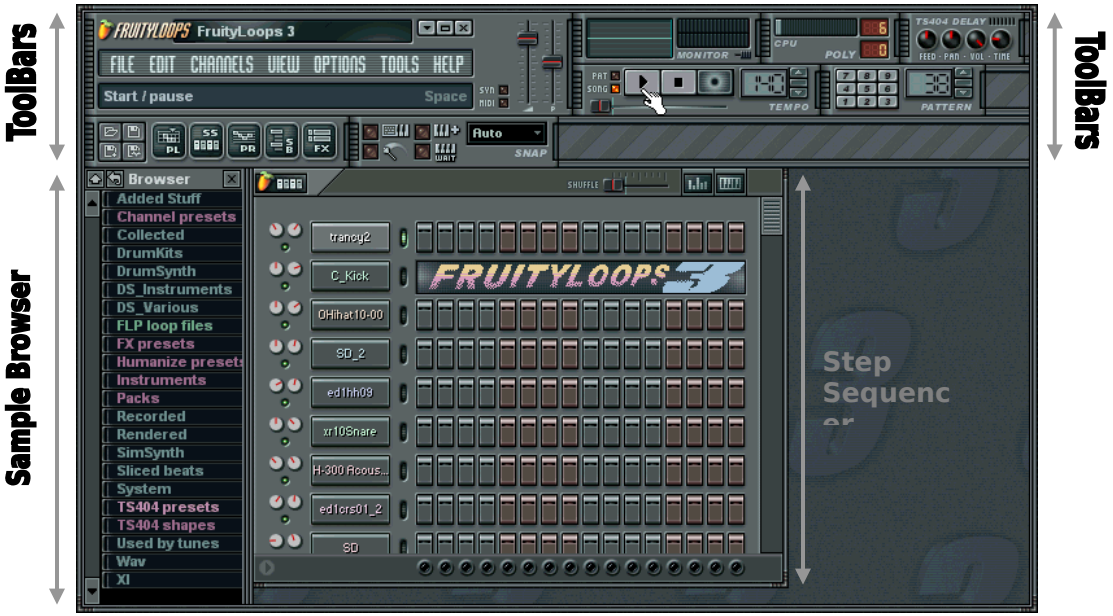


2. **Select an Output Driver** from the list in the pull-down menu. If you don't know which one to pick, just leave it as it is. Later on if you have sound problems, you can come back to this screen (by pressing **F10**) and experiment with the other options.

3. **The Mixing Buffer.** When you mouse over the buttons on the above screen, you'll get a pop-up explanation of each one except the Mixing Buffer. So we'll explain that here. Basically, if you make this buffer long, you are less likely to get choppy sound but changes you make to a playing loop will take longer to kick in. If you make it short, you are more likely to get choppy sound but changes will kick in faster. You want it short, but depending on your computer, you may need to come back to this screen later (**F10**) and make it longer. If you have a combination of a fast computer and a good sound card, you may be able to get the latency as low as 10ms. For a SoundBlaster Live, you can probably go as low

as 30ms. The **Use Polling** option can also improve latencies. Keep it turned on if you use Windows 95 or 98, but switch it off in Windows 2000.

4. **The Main Screen.** After you close the Environment Settings window, you'll be looking at a screen like the one below. Fruity loops is all about windows within windows. So you're looking at the outer **Main Window** with it's **Toolbars** at the top. Then within that you're looking at something called the **Browser** (left) and the **Step Sequencer** (right). If the toolbars are arranged differently for you, try widening the Main Window.



MAKE SOME NOISE

Press the Play Switch. That's the button the finger is pointing at on the above picture. You'll hear the hyperactive sounds of the Fruity Loops 3 demo loop. If this is not the first time you've run Fruity, you'll have to reload this demo. Select **Open** from the **File** menu in the top left and double click the file **NewStuff.flp** in the **Loops** directory.

Master Volume: It's the vertical slider just to the right of the menu bar and to the left of the play switch. This will be essential if you still live with your parents. (Get a life! ...or at least get some headphones...)

HELP!

This booklet is just supposed to get you up and running quickly. It is not meant to be a reference manual for everything Fruity can do (that would take a multi-volume encyclopedia!). Fortunately, there's a ton of info out there on what Fruity does. Here's how to get it.

1. **The Hint Bar.** This is located on the Main Window just under the Menu Bar (see the previous page, where it says "Start/Pause" in the top left). You can mouse over any of the controls within the Main Window and this panel will display a short description of what that control does. The reason it says "Start/Pause" in the picture is because the mouse is over the Start/Pause button. Make sense? The Hint Bar also shows you the **Shortcut Key** that will activate the same function. This is displayed on the right, where it says "Space" on the previous picture. Pressing this key has the same effect as pressing the corresponding button.

2. **On-line Help.** Fruity Loops also comes with a massive on-line help reference created by Stanislav Vasilev from **mmlabs**. Just use the **Help Menu** and select **Contents**. It's all there, in glorious Technicolor (we were way too cheap to print this guide in color.)

3. **Tutorial Loops.** Click **File→Open** and surf to the **Tutorials** directory. These loops contain notes on how to do various things in Fruity.

4. **The Web Site.** Fruity Loops comes with a massive web site at **www.fruityloops.com**. The site has a support section that includes a **FAQ** and a **Discussion Forum**. Check both of those to see if anyone has answered your questions already. If not, feel free to post your own question.

GET THE "GETTING STARTED" LOOPS

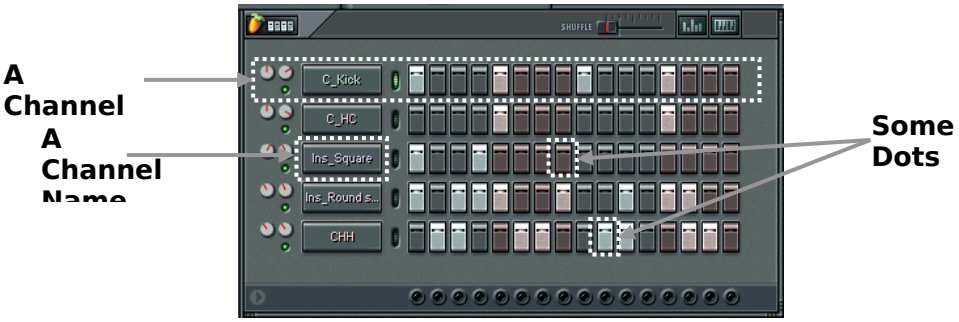
To use this guide effectively, you should find and load the "Getting Started" loops that were included in the Fruity package. Go to the **File** menu (above the Hint Bar) and click on **Open**. Alternatively, click on the **File Open Icon** below the Hint Bar. Either method will get you a file dialog box open on the **Loops Directory**. From here, double-click the **Tutorials Subdirectory**, then the **Getting Started Subdirectory** and you will [illegible] load up the first one (**GettingStarted1.flp**), [illegible] ection!

HEY! Don't skip that step. This guide will work a lot better if you're looking at the example loops while you read...

THE STEP SEQUENCER

When you start Fruity for the first time, you'll see the **Step Sequencer** window (see the "What Are You Lookin' At?" section). This is where you lay out your drum and melody patterns for your songs.

1. **What You're Lookin' At.** This is where you find **channels**, and **dots**. The channels are laid out horizontally (see below) and each one contains a single sound. Each channel has 16 dots. If you're musically inclined, these dots represent 16th notes. If not, think of each group of four dots as one beat, so 16 dots are the four beats of a basic drum loop. (The layout below is from **GettingStarted1.flp**. You should have this loop loaded now.)



2. **What Dots are For.** Clicking on a dot lights it up and tells Fruity to trigger the channel (play the sound loaded into that channel) at that point in the loop. For instance, the 1st, 5th, 9th, and 13th dots in the C_Kick channel are lit up, telling Fruity to play the kick drum sound four times during the loop (if you're still thinking of groups of four dots as a single beat, Fruity Loops will play the sound at the start of each beat.) Try changing the pattern of dots in the C_Kick channel. (If you need to turn a dot off, **right-click** it.) Once you've got the dots to light up like the picture below, press the play switch to hear what you've created.

Suggested Changes
Channel Controls
SHUFFLE
C_Kick
C_HC
Ins_Square
Ins_Round s...
CHH

3. **Play with the Channel Controls.** After you've set up the pattern, try playing with the **Channel Controls** on the left. The two round knobs (**wheels**) control the **volume** and **pan** of a single channel, and the green light switches the channel on and off. (Panning is like the balance control on your stereo. Turning this knob moves the sound from left to right in the stereo field.) If you want to reset a wheel to it's default position, **right-click** on it and select **reset**

4. **Make Your Own Beat.** Don't like the beat above? Good, make your own! Only, don't change the Ins_Round sample for now - it's playing the melody and you need to know more before you can mess with that. In the next sections, we'll teach you how to load in **new samples**, set up **melodies**, and change the sound of each channel (and even each dot) using **Fruity Effects**.

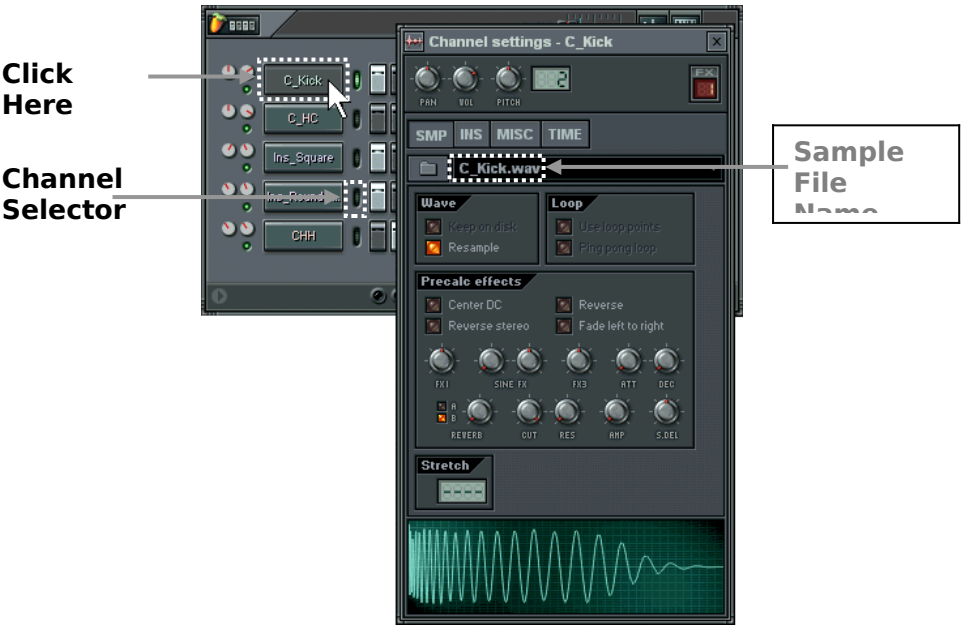
Don't Save! If you create a masterpiece and you want to keep it, at least save it under a new name. We need you to keep **GettingStarted1.flp** around so we can use it to explain some of the more advanced features later.

TWEAKING THE CHANNELS

In this section, we'll show you how to modify the sound of the loops you create by tweaking the sound sample on each channel. Fruity loops supports so much of this kind of tweaking that it's possible for two people to create loops that sound totally different using exactly the same samples. (Technically, each channel contains a **Generator** which could be sample-based or could be a synthesizer plugin. More on that later, though.)

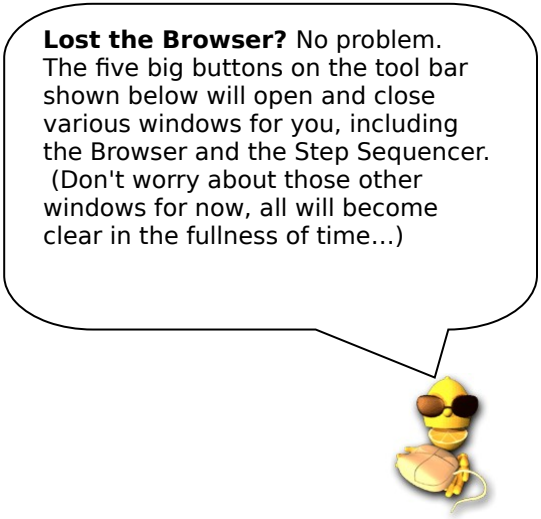
Wait! What's a "sample"? A sample is a little piece of sound stored in a disk file. Each channel in Fruity Loops uses a single sample, usually containing a single note (like a snare drum hit or a single bass note), but they can also contain entire beats or tunes. Samples are usually ".wav" file types, but Fruity supports ".xi" sound files too.

1. **Open the Channel Settings Dialog.** OK, let's get going and modify the kick drum sample. Load up the original version of **GettingStarted1.flp** again and click on the name "C_Kick" to bring up the **Channel Settings** window for that channel (shown in the picture below).



2. **Load a New Sample.** The first thing you can do is change the sample being used on the channel. The sample file name is shown on the picture above. Clicking on the **file icon** to the left will open a browser on the directory containing the file "C_Kick.wav" along with a number of other kick drum samples. As you click on them, Fruity will automatically play the sounds for you. Try opening some of these other samples and listening to the effect a new kick drum has on the sound of the loop.

3. **Check out the Sample Browser.** Another way to load samples is to use the **Sample Browser** (that's the other window you see when you first opened Fruity in the "What Are You Lookin' At?" section above.) This is a special browser for selecting and loading sample and loop files. To find the C_Kick sound, click on Packs, then Basic, and then Kicks. Left-clicking on a sample will play it, right clicking will open it into the selected channel. (You select a channel by clicking on the green light to the right of the channel name as shown above.)


Lost the Browser? No problem. The five big buttons on the tool bar shown below will open and close various windows for you, including the Browser and the Step Sequencer. (Don't worry about those other windows for now, all will become clear in the fullness of time...)

4. **Play with the Sample Effects.** Ok, at this point the best advice is to start the loop, then play with the controls in the sample (**SMP**) panel of the Channel Settings Dialog and listen to the difference in sound. Here's a short description of what some of them do. For more info see the on-line help.

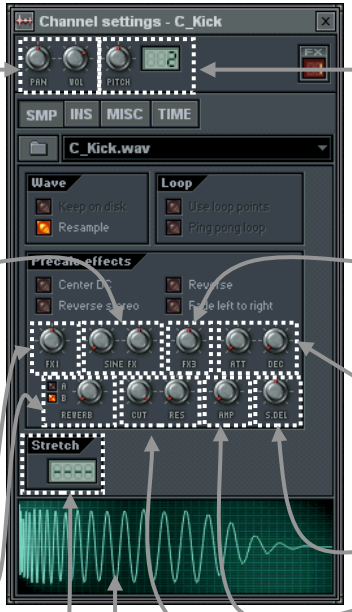
Vol, Pan: These are the volume and panning wheels that also appear on the main screen for each channel. Turning these will make the wheels on the main

Sine FX: A cheap sine wave effect. The first wheel controls the amount of the effect, the second controls the frequency of a sine wave that interferes with the

FX 1: A distortion effect

Reverb: Echoey effect that makes it sound like you're playing in a large room. ***A*** and ***B*** switches between two different

Stretch: Specifies exactly how many dots the sound should last for. If it's set to 0, there's no stretching. (Useful for fitting break beats.)



Wave View Window: Shows the shape of the sound sample. Click here to hear the sample with all the effects . Also a drag and drop window for loading

Pitch: The wheel changes the pitch of the sample (speeds it up or slows it down). The number indicates how far the pitch wheel can stretch. Move it

FX 3: Makes the pitch of the sound to change as it plays. Try it on the "CHH" sound.

Att, Dec: These control the attack and decay. If you turn up the attack control, the sound will take longer to fade in. If you turn up the decay, it will fade out faster.

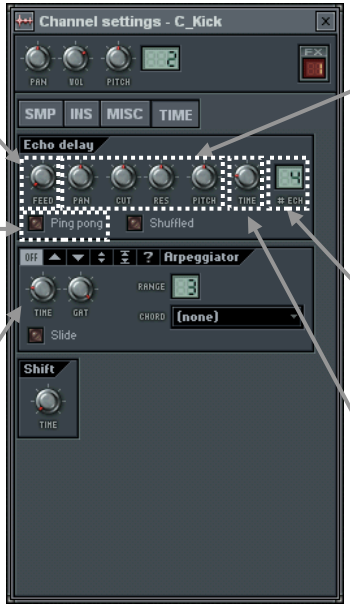
S.Del: Stereo delay effect.

Amp: Amplifies sample.

CUT, RES: Cutoff and resonance filters. These filters produce a really cool effect that gets used a lot in

Can't hear the difference? If you press a button or turn a wheel and you can't hear any difference in the sound, try making the same change on another channel. For example, sometimes a change that doesn't affect a kick drum much will make a huge difference to the sound of a snare. If you still can't hear the difference, stop the loop from playing and listen the sounds separately by clicking on the wave view window. You might be able to hear the effect better without the other instruments.

5. **Add Some Echo.** Go back to **GettingStarted1.flp**, open the C_Kick channel settings and click the **TIME** tab to get the view shown below. These controls can be used to set up a cool echo effect for a single instrument. Start by turning up the **FEED** about a quarter of the way, and listen to what happens to the kick drum sound... Try playing with the other controls to change the sound of the echo...



Feed: Echo volume (sets how quickly the echo

Ping Pong: Makes the echo flip back and forth from left to right (sounds cool

Arpeggiator: This gets explained in the **Generators** section of this

Pan, Cut, and Res do the same job as on the *sample* panel, but the effects build up as the echo dies out.

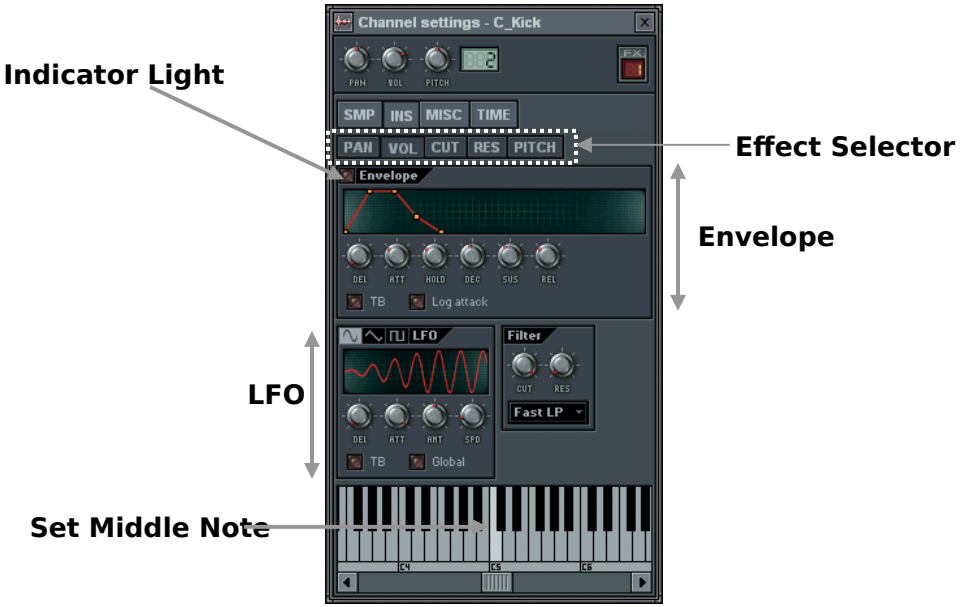
Pitch controls the pitch of the echo. If you turn this wheel right, the echo will get higher as it dies out.

 # Ech: Number of times the instrument will echo before it stops.

Time: Controls the amount of time (in dots) between each echo. Maximum delay time is 16 dots.

Getting Echo Time Just Right: The "Time" control is fine-grained to get you just the exact echo you want. But if you want to echo on the beat, you will have to look at the Hint Bar while you turn the dial. If you want the echo every three dots, just turn the dial until the hint bar shows "3:00".

6. **Play With the Instrument Settings.** Ok, let's take a quick look at the **INS** panel before we move on. (There's also stuff you should read about in the **MISC** panel too, but you can get that info from the **On-line Help**.) Click on the INS tab and you'll get to the **Instrument Settings**. Here you can add **Envelopes** and **LFO** to your sample for the **Volume**, **Pan**, **Cutoff**, **Resonance**, and **Pitch** settings.



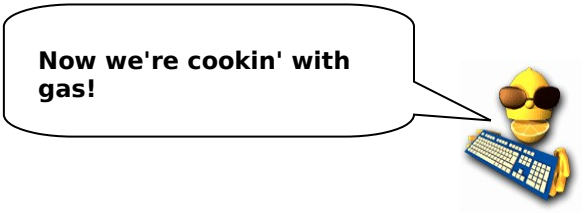
7. **What's an Envelope?** An envelope causes a particular parameter to rise, then fall over the life of the sound. The most classic thing to do is to have a **Volume Envelope** that makes the sound rise then fall in volume. But you can also put an envelope on Pitch, Cutoff, and Resonance. You can get more info on what all the parameters mean in the **On-line Help**, but Delay (**DEL**) sets how much time passes before you hear the sound, Attack (**ATT**) sets the fade-in at the beginning, Hold (**HOLD**) sets how long the sound lasts at full volume, and Decay (**DEC**), Sustain (**SUS**), and Release (**REL**) control how the sound fades away. Play with the wheels and watch the graph change.

8. **What's LFO?** LFO stands for **Low Frequency Oscillation**. It makes a particular effect oscillate up and down during the life of the sound. Again, more info is available in the **On-Line Help**, but Amount (**AMT**) sets how much the effect oscillates, Speed (**SPD**) sets how quickly it oscillates, Delay (**DEL**) sets how much time passes before the oscillation starts, and Attack (**ATT**) sets how quickly the oscillation ramps up to it's full amount. Play with the knobs and watch the graph change.

9. **How do I Use Them?** Use the **Effect Selector** (see diagram above) to choose the effect, then turn the knobs on either the Envelope or the LFO. To turn the Envelope on and off for each effect, click on the Indicator Light. To turn off the LFO, reset the Amount (AMT) to the middle (knob pointing straight up.)

10. **Why Does the Instrument Panel have More Cutoff and Resonance Controls?** It may seem redundant to have Cutoff and Resonance in the SMP panel and then again in the INS panel, but it's not. Trust us ☺. The Cutoff and Resonance here are added in **real time** rather than statically, so they can be controlled by the LFO and Envelope on this screen. (They can also be **Live Recorded** but that's for another chapter...) The INS panel cutoff and resonance are also nicer because they allow you to change the type of filter you use (more on this in the **On-Line Help**.)

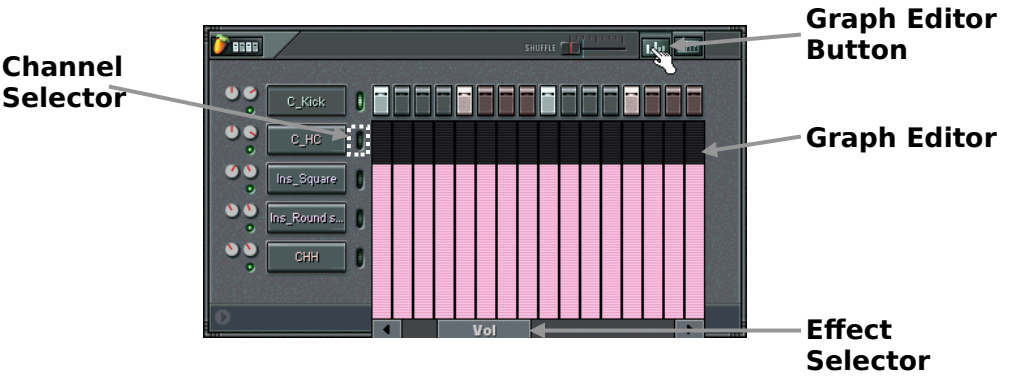
11. **Why Can't I Hear the Effect?** Well, if you're still on the Kick Drum from GettingStarted1.flp, it's going to be pretty hard to hear any LFO effect, although the Envelope might make a difference. These effects are more audible on longer samples. To hear the effects better, go to the Instrument Settings for the Ins_Round sample and play with the settings now.



TWEAKING THE NOTES

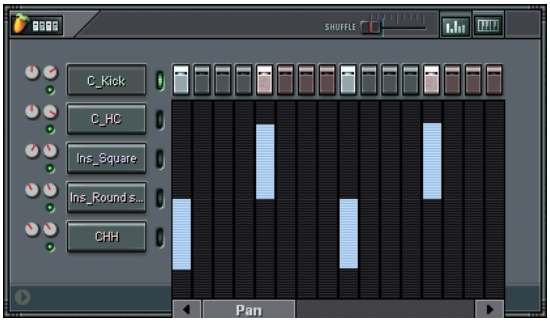
By now you're familiar with many of the ways Fruity lets you tweak and shape your sounds. In this section, we'll show you how some of those effects can be applied to each dot separately. We'll also show you how to program melodies.

1. **Check out the Graph Editor.** The easiest thing to wrap your mind around is probably the **Graph Editor** utility. First, select a channel to edit by clicking on the channel name, or by clicking on the green Channel Selector light to the right of the channel name. Then press the button that makes the graph editor pop up as shown below. (Make sure you've loaded up the original version of **GettingStarted1.flp** first.)

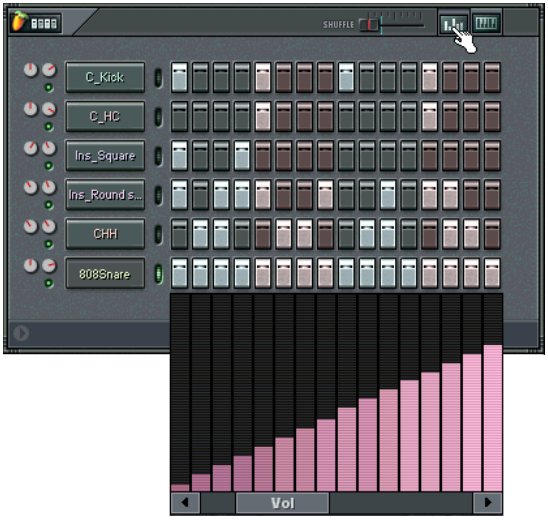


2. **Check out the Effects.** Try clicking-and-dragging the **Effect Selector** to see which of the various effects are available. You should find **Pan**, **Volume**, **Filter Cut, Filter Res, Pitch**, and **Shift**. Most of these effects were discussed previously, in the "Tweaking the Channels" section. The difference here is that you can also tweak the value of these effects for each separate dot. Each bar on the graph sets the effect value for the single note above (or below) it. **GettingStarted1.flp** already has some tweaking in it. Check out the Volume tweaks in the CHH channel and the Cutoff tweaks in the Ins_Square and Ins_Round channels.

3. **Panning the Kick Drum.** Try setting the pan effect as shown below for **GettingStarted1.flp**. The pan graph centers in the middle. You can set pan values by clicking inside the bar for each note at the desired level. After you have set up the view shown below, you should hear the kick drum flipping back and forth from one speaker to the other. This sounds really cool if you combine it with the 3-dot echo you added in the previous section…

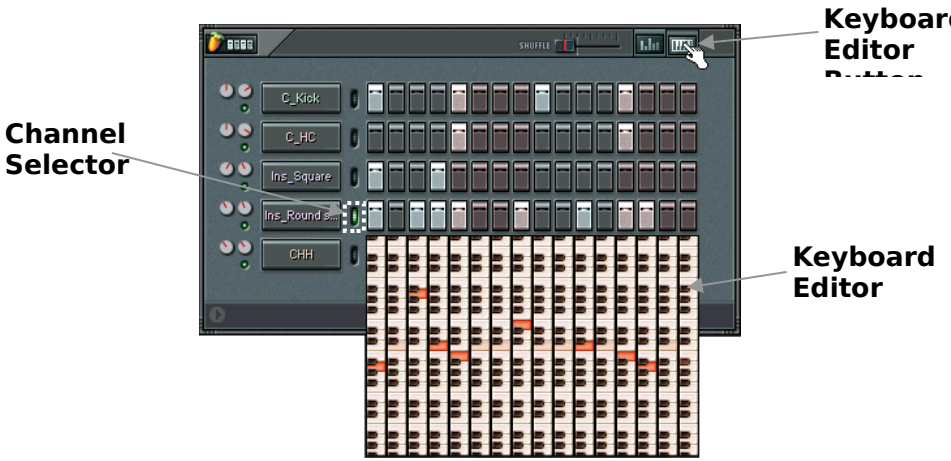


4. **Try the Volume.** You can get instruments to fade in and out over a pattern using the volume graph. Try this effect on an added snare channel as shown below. (Remember, it's **Alt-S** to add a channel. The snare below comes from **Packs→Basic→Snares**.) This graph does not center in the middle like pan, but goes from zero to maximum, with zero at the bottom. Volume slides like this can sound extra cool when combined with Cutoff and Resonance slides. (Hint: to make a smooth line in the graph editor, right-click on the first bar, then drag the mouse to the right to set the values of all the bars at once.)

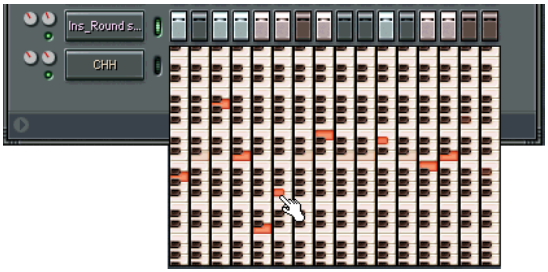

SHUFFLE
C_Kick
C_HC
Ins_Square
Ins_Round s...
CHH
808Snare
Vol

5. **Play with the Other Effects.** Try to get a feel for the other effects on the graph editor. **Filter Cut** and **Filter Res** can be used to add or subtract values to the main cutoff and resonance wheels in the INS panel of the channel settings dialog box. (See the "Tweaking the Channels" section.) **Pitch** makes the sample higher or lower, like the pitch wheel in the channel settings dialog box. **Shift** can be used to push a dot closer to the dot beside it (you more musical types can use this to groove a beat).

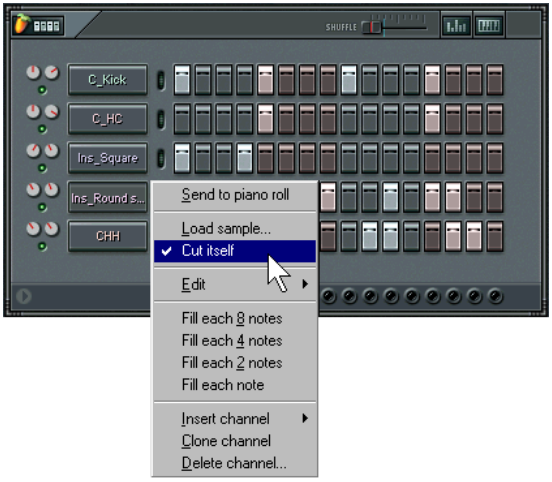
6. **Check out the Melody**. When you play **GettingStarted1.flp**, that synth melody you hear is being played on the Ins_Round channel. To see the notes of the melody, click the **Keyboard Editor** button with the Ins_Round channel selected as shown below. What you see now is a vertical piano keyboard for each dot on the screen. Hopefully, you have some keyboard skills. (If not, it's time for some lessons!) You can change each note by **left-clicking** one of the buttons on the keyboard. **Right-click** turns the note off.



7. **Change the Melody.** Now go ahead and change the melody! You can make it sound how you want, but below is a suggestion for those who like a note of tension in their music (you can find this melody in **GettingStarted2.flp**). You can use the keyboard editor on any sample - synth, bass, guitar, even drums. Have fun!


Ins_Round s...
CHH

8. **Super Important Tip.** When you want to make a melody out of long samples, you often need to set it up so that each note cuts off the previous one. You can do this most easily by **right-clicking** the **Channel Name** in the Step Sequencer and selecting **Cut Itself** from the pop up menu. Notice that the Ins_Round channel has this option selected. Try deselecting it, but be warned - the results can be nasty!

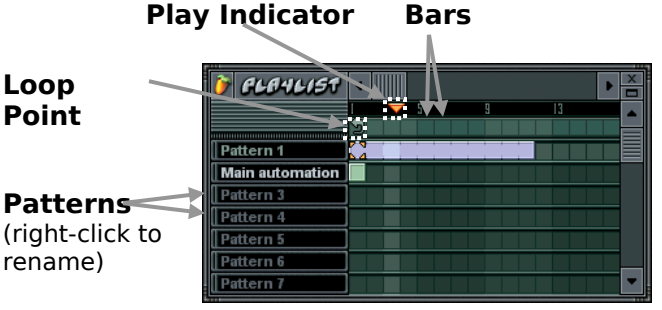


THE PLAYLIST (from Patterns to Songs)

Now you've seen most of what can be done with sampled sounds in a single pattern. In this section we'll show you how to program more than one pattern and link them together into a longer loop. Load up **GettingStarted1.flp** and read on...

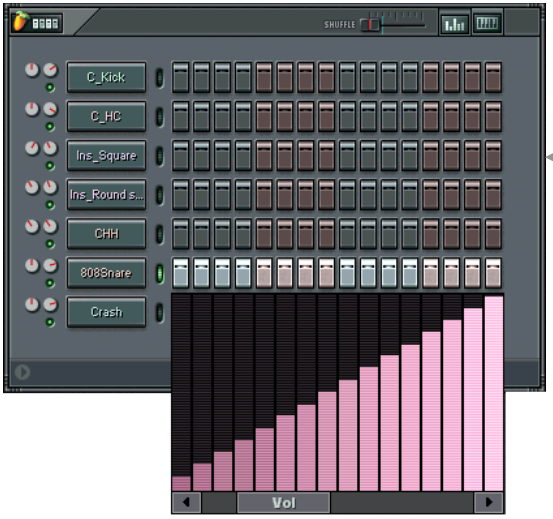
1. **Check out the Pattern Selector.** Fruity Loops lets you create hundreds of different patterns. In the previous sections, we've just been working with pattern 1, but we can access the other patterns either by changing the number in the **Pattern Number** box, or by pressing one of the pattern numbers on the **Quickpad** (this is a shortcut for quick access to the first 9 patterns.)

2. **Check out the Playlist.** This screen can be opened using the button under the hint bar, or by hitting **F5**, or by right-clicking the **Song** button on the main screen (see above). Try it and you should get a new window that looks something like below. This window works very much like the pattern view, except that the dots operate on whole patterns rather than single channels, and you can program hundreds of dots at a time. Notice that **GettingStarted1.flp** consists of pattern 1 repeated 11 times and pattern 2 once at the beginning. Make sure **Song** is selected and press **Play**. You should see the **Play Indicator** on the playlist start to move, and hear the patterns it is playing. When it comes to the end of the dots, it jumps back to the **Loop Point** and continues playing. Try moving the loop point (right-click where you want it to go) and see what happens. (If you press the **Pat** button, Fruity will just repeatedly play the current pattern in the Step Sequencer.)



3. **What's the Point?** Now you can assemble a number of patterns together to make a song. This lets you alter melodies, change beats, insert fills, and reuse some of the early parts of the song later. Many composers use a separate block of patterns for drums, bass, lead, etc. so they can work on them separately at first, and then piece the song together in the Playlist.

4. **Add Fill Patterns to GettingStarted1.flp.** Here's a simple example. Select pattern 3 using the Pattern Selector and then lay it out as shown in the first picture below using the 808Snare found in **Packs→Basic→Snares**. Press the Pat button to hear this pattern play. Then repeat and lay out pattern 4 using the Crash symbol found in **Packs→Basic→HiHats**. (You will have to add two new channels for this using **Alt-S**)



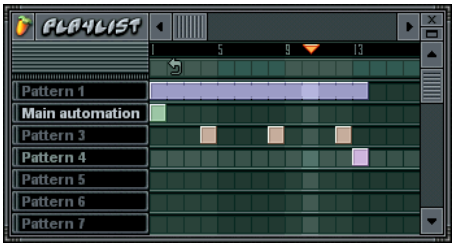
Pattern 3

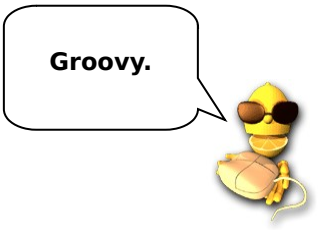
Pattern 4

Big
deal...

SHUFFLE
C_Kick
C_HC
Ins_Square
Ins_Round s...
CHH
808Snare
Crash

5. **Using the Fill in the Song.** Yeah, big deal. But now lay out the Playlist as shown below, and hopefully you'll begin to get the idea. Note that you need one extra dot for Pattern 1 and you need to move the Loop Point to the second bar (Right-Click to do that.) You can find the finished product in **GettingStarted3.flp**.



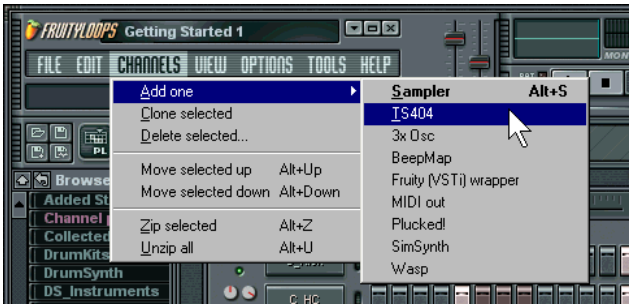


6. **What the Hell is in Pattern 2?** By now you probably checked out pattern 2 and discovered that it seems to be empty. Patience, my child. All will be revealed eventually (but you could experiment with removing the pattern from the playlist to see what difference it makes...) We'll talk about what pattern 2 does in the section on **Live Recording**. For now, just enjoy the ride!

GENERATORS (from Samples to Synths)

Up until now we've only been playing with **Sample Channels**. But Fruity also supports channels that contain sounds made in real time by software synthesizers like **Wasp**, **SimSynth Live**, and the **TS404**. To use the proper terminology, every Channel contains a **Generator** which could either be a sample or a synthesizer plugin in combination with the effects in the Channel Settings dialog. The combination of these software synthesizers with the sample channels gives Fruity a major power boost!

1. **Adding a Synthesizer Channel.** To add a channel containing a synthesizer Generator, click on **Channels→Add One** as shown below and select one of **TS404**, **3xOsc**, **BeepMap**, **Plucked!**, **SimSynth Live**, or **Wasp**.



2. **What to Expect.** The new channel will appear in the Step Sequencer and the Generator's **Configuration Screen** will appear (except for the TS404). If the Configuration Screen is small, it will appear inside a Channel Settings window (3xOsc, BeepMap, Plucked!). Otherwise, it will appear as a standalone window (SimSynth Live, Wasp).

3. **How Do I Use 'Em?** We will review the TS404 in detail in the next section, and much of what you learn there will be applicable to the other synths. But it's important for you to know that most of these synthesizers have their own help available. If the Configuration Screen for the Generator is embedded in a Channel Settings window, click on the channel name. If it's in a standalone window, click on the corner of the dialog.

4. **Preset Sounds.** All Synth generators have preset sounds available. You can get to them from the **Presets** section of the menu shown above, or by clicking on the little arrows in the top right (see picture above).

5. **The Channel Settings.** All these generators have a Channel Settings window that you get by clicking on the Channel Name, just like for Sample Generator Channels. But since each generator is different, they may not all have all of the panels as the Sample Generators do. For instance, the TS404 only has the MISC panel, while the 3xOsc has all of INS, TIME, and MISC.

6. **What do these Generators Do?** OK, here's the skinny on each type of synthesizer. For more info on the TS404, see the next chapter. For more info on everything else, see the **On-Line Help**.

   a. **TS404.** We get into this in more detail later, but it's a techno machine for creating synth lines and basslines which sound similar to the classic TB-303 machine.

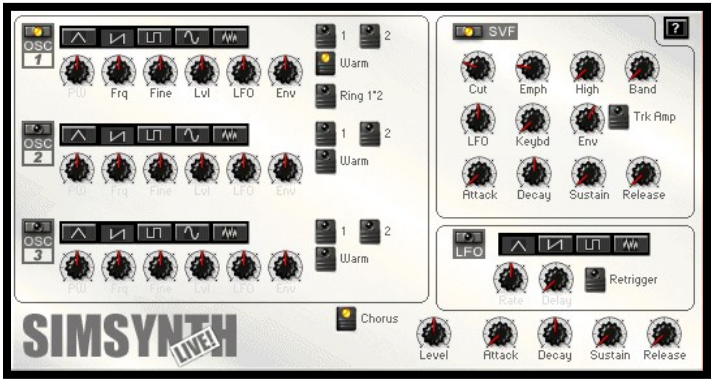
   b. **3xOsc.** This is a very plain generator that allows you to mix three **Oscillators**, each of which generates a tone. The sounds on their own are not exciting, but they are good raw material to be combined with INS panel effects and other Fruity Effects (explained in a later chapter).

   c. **BeepMap.** This is a weird one. Takes a bitmap image file and turns it into a sound, with strange and wonderful results.

   d. **Plucked!** A synthesizer that specializes in stringed instrument sounds like guitars, harps, mandolins, etc.

NORMALIZE
GATE
Decay
Color
PLUCKED!
WIDEN

e. **SimSynth Live.** A fully-functional digital synthesizer. Use this baby to create phat-sounding analog sounds for your dance and trance tracks.



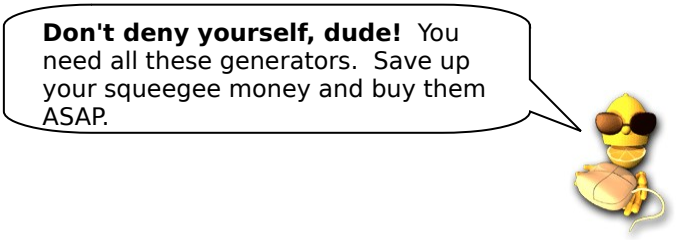
f. **Wasp.** Another full digital synthesizer. This one is better for creating fast, buzzing, techno-oriented sounds (hence the name).

7. **Even More Generators!** With the VSTi and Dxi Wrapper channels you can now add any VSTi or DXi plugin synthesizer you download or buy. Just add a DXi or VSTi channel from the Channels Menu and you'll get a window like the one below. Click on the file icon to load in a VSTi or DXi syntehsizer plugin.

8. **Included Plugin Synths.** Of course, we've thoughtfully included a VSTi plugin synth, confusingly called the **DX10**, and a DXi plugin synth called the **DreamStation**. Note that when you try to load the DX10, you'll be sent to plugins directory with tons of files. You're looking for the file named "mda DX10.dll". The other files here are all **FX Plugins**, to be discussed later in the section on Fruity Effects.

9. **Do I have to register?** Some of these products are made by Fruity partners, so yes in some cases you do have to register them to unlock their full capabilities. Go to **www.fruityloops.com** for more information on where to send your hard-earned cash.

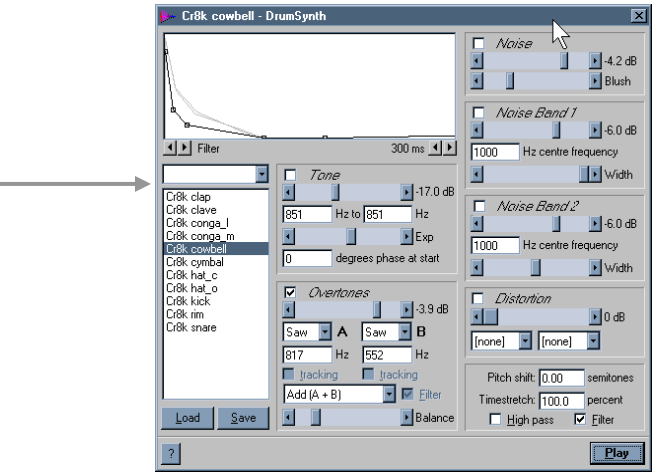
10. **Where Can I Get More?** There are literally *hundreds* of synth plugins out there to download. Some of them are free, and some you have to pay for. Search the web and **www.fruityloops.com** for good deals. One place you should definitely bookmark is **www.kvr-vst.com** - a huge site with every VSTi plugin you could possibly want listed.



11. **The Arpeggiator.** Now that we've introduced the Synth generators, we can finally tell you what the **Arpeggiator** section in the Channel Settings window is for. Open one of the synth channels (SimSynth Live, for instance) and go to the TIME panel of the channel settings box. Now **click the up arrow** and **select a chord**. Now go to a new pattern and place a single SimSynth note and press play. Instead of a single note, you get a repeating arpeggio. Cool, huh? Read more about this in the on-line help.

12. **Static Synthesizer Sounds.** Fruity also contains static support for the standalone version of **SimSynth** and a drum sound synthesizer named **DrumSynth**. If you own either of these pieces of software, Fruity can read their output files into a normal Sample Channel. It won't sound quite as good, but this way you can get the phat sounds of SimSynth without the huge processing load of a real-time synth. DrumSynth is free from **www.mda-vst.com** and you can get SimSynth at **www.fruityloops.com**. You should find some **presets** for both synths in the **Sample Browser**.

DrumSynth

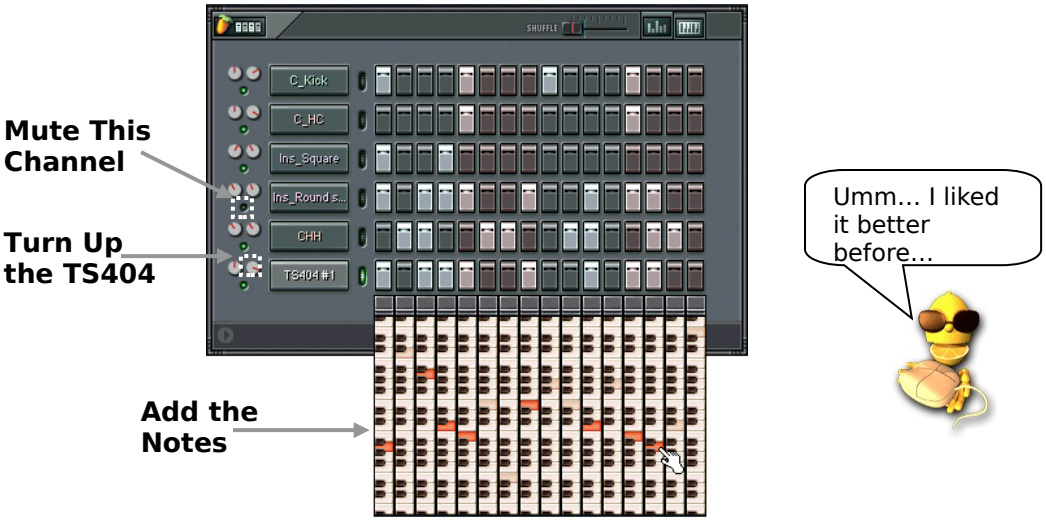


INTRODUCING THE TS404

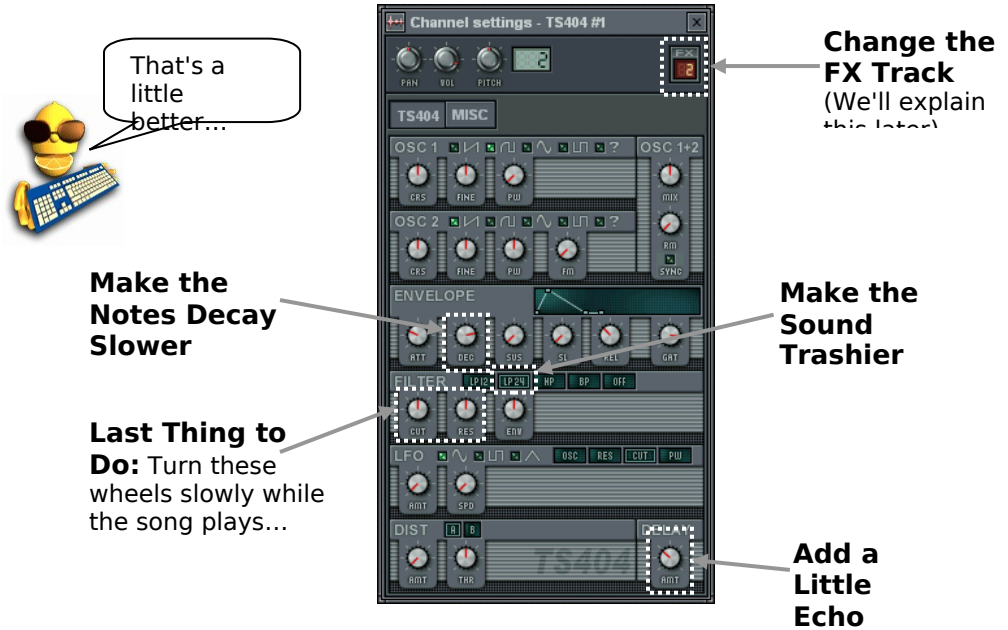
The TS404 was originally a standalone synthesizer designed to perform like the classic TB303 bass-line sequencer that gives modern techno it's unique sound. The 404 is not intended to be an exact replica of that classic machine, but it will still lend a unique techno flavor to your compositions.

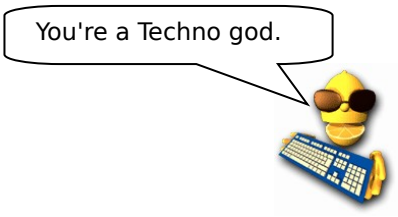
1. **Add a TS404 Channel.** First of all, load up **GettingStarted1.flp**. Then add a TS404 channel as shown in the previous section.

2. **Copy the Notes from Ins_Round.** That's right, we're going to replace the Ins_Round sample with the TS404. First, use the keyboard editor to program the TS404 notes as shown, then click on the **Channel Mute** light to turn off the Ins_Round channel and play the result. You may want to turn up the TS404 Channel a little bit too.



3. **Not Too Impressive Yet!** OK, so that doesn't sound too good. That's because you're using the TS404 default settings. Click on the channel name to bring up the TS404 Channel Settings Dialog as shown below, and tweak the wheels as shown below. The final result can be found in **GettingStarted4.flp**.


That's a little better...
Channel settings - TS404 #1
Change the FX Track
(We'll explain this later)
Make the Notes Decay Slower
Make the Sound Trashier
Last Thing to Do: Turn these wheels slowly while the song plays...
Add a Little Echo



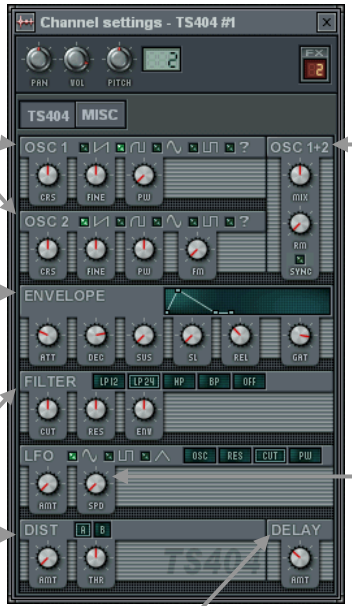
4. **Understanding the Controls.** Like with the other channel settings, this stuff is explained further in the on-line manual. But for now, here's a brief overview of what the controls do. Have fun, and try to get a feel for it...

The oscillators: You can have two slightly different sounds playing at once. Click on the little pictures for different wave forms. Set the octave by turning the CRS

The Envelope: Attack, decay, release, sustain, etc. (Check out the little

The Filters: Cutoff and Resonance. Try the buttons too

Distortion: Turn up both wheels for a nastier sound.



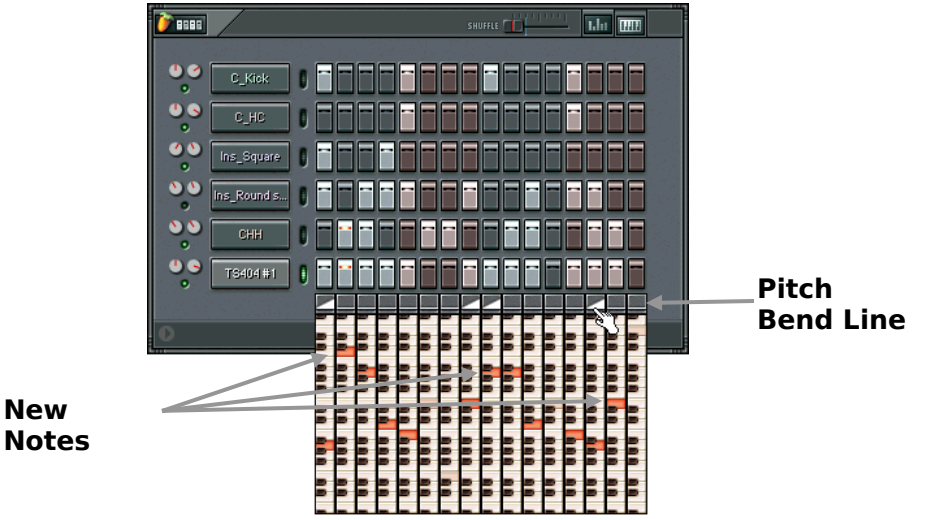
Oscillator mixing: Turn the MIX wheel to hear more or less of oscillator 1 and 2.

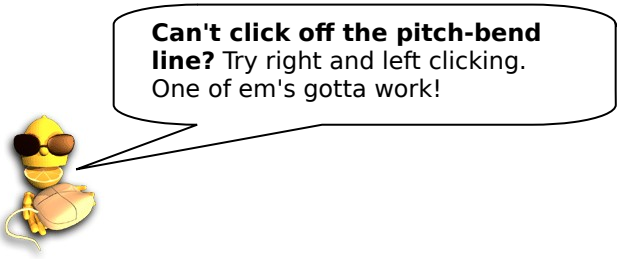
LFO: Low frequency oscillation. This function slowly turns a parameter such as the CUToff up and down. Try turning up the amount (AMT) and the speed (SPD). Then try playing with the buttons to make the RESonance, tuning (OSC) and

Delay: Controls the amount of echo.

You Wanna Set the Delay?
OK, there's only one delay line for all TS404 channels. It's on the toolbar at the top of the Main Window..

5. **Pitch-bending the 404.** One last thing. You can bend the notes on the TS404 to make some really cool synth lines. The keyboard for the 404 is a little different than the other channels. It has a **Pitch Bend Line** at the top. If you click on the Pitch Bend Line, the current note will slide into the next one. Go back to **GettingStarted4.flp** and try setting up the keyboard as shown below. The finished result is in **GettingStarted5.flp**.





FRUITY EFFECTS

Now in Fruity Loops you can add cool effects to your channels. The effects you can add range from simple things like a **volume control** to more advanced effects such as **chorus**, **reverb**, **phaser**, **delay**, **flange**, and **EQ** among others. You can achieve these effects through the use of **FX Plugins** and **FX Tracks**. Remember when we told you to change the FX Track in the TS404 Channel Settings? Well now we're gonna explain what that was all about.

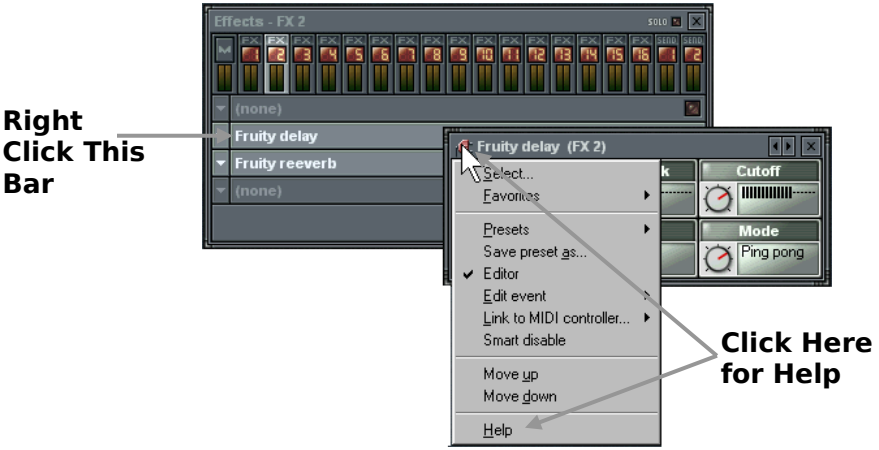
1. **Open the Master Effects Screen.** Guess what? The **GettingStarted** Loops were using Fruity Effects all along! Load up one of them and bring up the **Master Effects** screen by pressing **F9** or by going to **View→Effects**. You'll get a window like the one below…

2. **What You're Lookin' At.** Along the top are the FX Tracks. You have one **Master Track**, 16 **Regular Tracks**, and 2 **Send Tracks**. The Master Track is selected by default. Each track has room for four FX Plugins. The Getting Started Loops use the **Fruity 7 Band EQ** plugin in the Master Track, and the **Fruity Delay** and **Fruity Reverb** plugins in Track 2. Try changing the track to find the other plugins.

3. **Turn Plugins On and Off.** Just left-click on a plugin to turn it on and off. Try this with the loop running to hear the difference.

4. **Select Plugins.** If you want to add new plugins, click on the arrow where you want to add the plugin and then choose from the **Favorites List** or choose **Select** to choose from the entire list and configure your favorites.

5. **Tweak the Plugins**. Right-click the plugin to open and close it's Plugin Settings screen. Some plugins have a plain interface like the **Fruity Delay** shown below. Others have fancier looking controls. Most plugins come with their own help as shown below, so we won't go into how to use the controls here. But for now, why not play with them to see what they do?

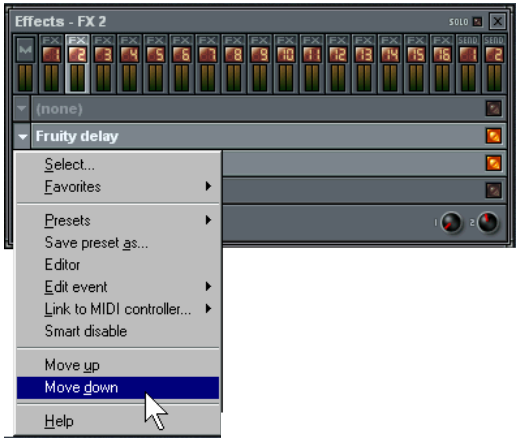


6. **Sending Sound to the Plugins.** Now we can finally explain what the box in the top right of the Channel Settings does. Any effects placed in the Master FX Track will be applied to all the sounds in the song. But effects in the numbered Regular FX Tracks will only be applied to the Samples and Synths which have selected that FX Track in their **Channel Settings Dialog**. So, in **GettingStarted5.flp**, the Ins_Round and TS404 Channels are sending their sound to FX Track 2, where Fruity Reverb and Delay will be applied. The other channels are sending to FX Track 1 (default) which contains no effects.

Channel settings - TS404 #1
PAN
VOL
PITCH
FX

7. **What are the Send Tracks For?** There are 2 special Send Tracks that take their input from other FX Tracks, rather than from Generator Channels. Suppose you want to put the same Fruity Reverb on Guitar and Drums, but you want to add Fruity Delay to the guitar and EQ to the drums. Easy. Send the drums to Regular FX Track 2 where you put the EQ. Send the guitar to Regular FX Track 3 where you put the Fruity Delay. Then put the Reverb in Send Track 1 and turn the Send 1 wheel on Regular FX Tracks 2 and 3 to send the output of these tracks to Send Track 1. Now you have the same reverb applied to both guitar and drums, but you only had to use a single reverb plugin.

8. **Changing Plugins Order.** The order in which you add effects plugins has a huge impact on the way the final output sounds. Plugins are like guitar stomp boxes. On each FX track, the first plugin in the list is applied first, then the output of that plugin is fed to the second, and so on. To make it easier to experiment with effects order, Fruity Loops has a simple function to move an effect up or down in the effects chain. It's on the effects menu shown below (**Move Up** and **Move Down**.)



9. **What do the Plugins Do?** Like we mentioned, you can get on-line help for all of the Fruity Plugins, but here's a quick rundown on what they all do…

   Fruity 7 Band EQ. Equalizes your sound (just like on your Dad's stereo at home.)

   Fruity Balance. Lets you change the pan and volume while live recording.

   Fruity Bass Boost. Boost that bass for a super-phat sound.

   Fruity Blood Overdrive. Use this to distort channels.

   Fruity Center. Use for real time DC offset removal.

   Fruity Compressor. Use this to flatten out the dynamics of the sound. Apparently Fatboy Slim uses massive compression to get his drums to sound the way they do…

   Fruity Delay. Use for a true echo (not just repeated samples like the channel echo).

   Fruity Fast LP. Use for low pass filtering that's CPU friendly (cutoff and resonance).

   Fruity Filter. More cutoff and resonance filtering that’s not so CPU friendly.

   Fruity Flanger. If you have to ask, you haven't heard it yet. Real popular among guitar players, this LFO-type effect can add a cool feel to any song.

   Fruity Free Filter. Yet another filter - a classical 12db instead of a state variable filter like the Fruity Filter (whatever the hell that means.)

   Fruity Mute. Use this to mute (silence) channels while live recording.

   Fruity Notebook. Keep your song notes here! This is the plugin used in the Tutorial Loops that came with your package.

   Fruity PanOMatic. Useful for panning the sound back and forth smoothly.

   Fruity Phase Inverter. Use to reverse the stereo phase (left and right).

   Fruity Phaser. Like the Flanger, but even cooler.

Fruity Reeverb. Use for a much nicer reverb than you can get on the Channel Settings dialog.

mda DX10. This is actually a synthesizer plugin (see the Generators section of this guide). VSTi Synth and FX plugins have to live together in the same directory. You'll just have to remember which is which.

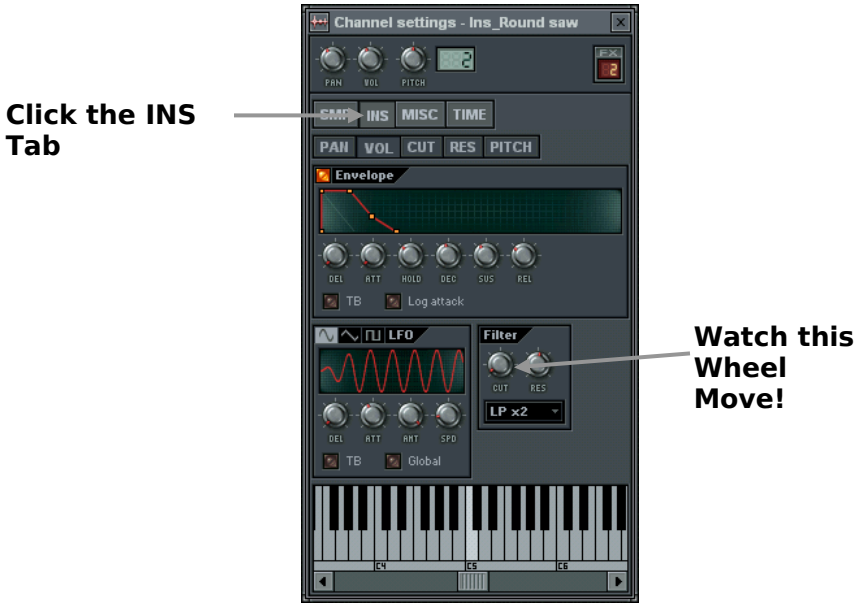
10. **Preset Effects.** If a plugin has built in presets you can access them through the **presets** section of the effects menu as seen above. You can create your own presets by clicking save preset. When you do this, Fruity Loops saves the positions of all the plugin controls so that you can get that exact sound back again later. If you save your presets in the directory Fruity Loops suggests, then it will appear on the menu under **presets**.

11. **Getting New Plugins.** We gave you a great selection of FX Plugins with your Fruity Package. But people are always creating new ones, and you can find many of them on the web. Some are free and some cost money. Surf the web to see what you can find! Installation is pretty straightforward. Put everything into **FruityLoops3/Plugins** (but if it's a **VST** plugin, it should go in the VST subdirectory.) Restart Fruity Loops and your new plugin should appear in the list.

12. **CPU Considerations.** "WOW!! I can use as many plugins as I want?!?" Actually, no you can't. Each plugin you use takes up a certain amount of your computers power. Some take more power than others. The number of plugins you can use before your computer starts grinding and running out of breath depends directly on your CPU speed (you know, that Megahertz thing) and also somewhat on the amount of memory you have. There is no formula for how many plugins you can use, but if the sound starts breaking up after you add a plugin, it's a good sign that you've gone a few plugins too far. Don't forget about the **Send Channels**, though. They can help you cut down on the total number of plugins.

LIVE RECORDING

Load up **GettingStarted1.flp**, open the Channel Settings for Ins_Round, and click on the INS tab. Now start the loop and watch the cutoff wheel. Hey! It moves while the song is playing! What's up with that? That, my friend, is what we call Live Recording and it's the key to making your songs come alive…



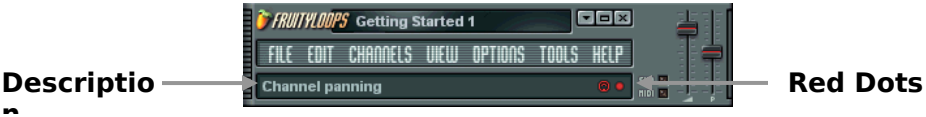
1. **Choose an Automation Pattern.** OK, this is important. Finally, we can tell you what Pattern 2 does in **GettingStarted1.flp**. It's where the Live Recording data is stored that moves the Ins_Round and Ins_Square cutoff wheels. The only way to not tie yourself completely in knots over where you stored your Live Recording data is to **always have one pattern where you do all your Live Recording.** For this song, it happens to be pattern 2. Then you need to place that pattern in the Playlist at the beginning of the song to play back the live tweaking. As you learn more about what you are doing, you can break out of this mold, but you need to start simple.

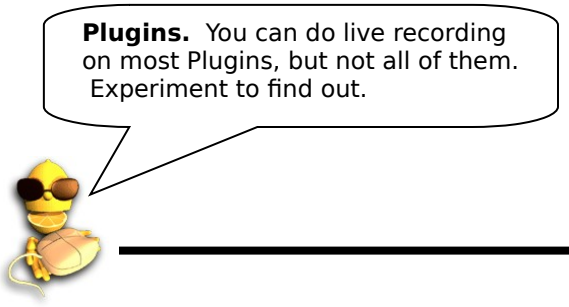
2. **Record Some Live Tweaking.** The easiest thing to do is load up **GettingStarted5.flp** - the one with the TS404 in it. Open the Channel Settings Dialog, start the song, and practice playing with the CUT and RES wheels of the TS404. When you think you've got something groovy, **make sure you've selected pattern 2** (the Main Automation pattern), then press the **Record Switch** shown below. Then start the song and work your magic. The song will play once and then stop. Turn recording off and press Play. You've just done your first **Live Recording** session!

3. **Set the Buffer Length low.** You may have noticed that there is a short delay between your tweaking and Fruity's response. That's controlled by the buffer length (hit **F10** and select the **Wave** tab). The lower you set this slider, the faster Fruity will respond. But don't set it too low, or the sound will be choppy (see the "What are You Lookin' At?" section).

4. **Important Note.** When you've got the Recording Switch on and the loop is playing, moving a wheel will erase over all the previously recorded tweaks from that point in the song until the end. This can be frustrating, so often it's best to get the recording approximately the way you want it and then make further changes in the **Event Editor** described in the next section.

5. **What can be Recorded?** Most wheels and sliders are recordable, including those that control Plugins. But some controls aren't recordable. The quickest way to tell what's recordable is to mouse over a control and look for the red dots in the Hint Bar. If these dots appear, then you can record that control.





LemonBoy's Live Recording Advice…

Always, always, always check the pattern selector before you start recording!!!

Try to get your song laid out the way you want it before you start live recording. Once you have events recorded, it is difficult to change the layout of the playlist in a way that will still sound good.

Always save a backup copy of your loop before you start any live recording. That way if you mess things up or change your mind, you can go back to the clean copy.

Save your loop frequently during live recording. If you accidentally tweak something and erase some events, you can always go back to the previous version.

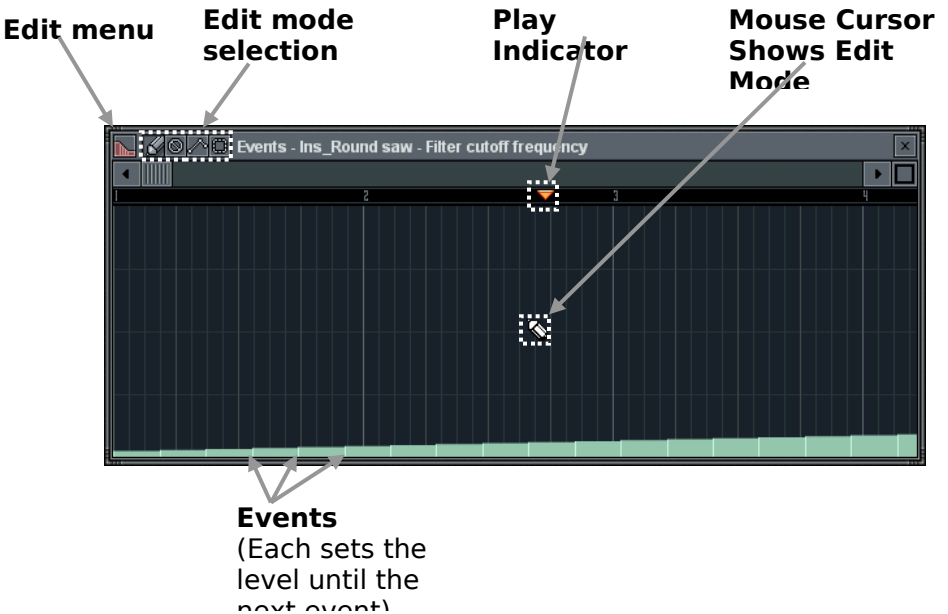
Get yourself an External MIDI Controller to make your life easier (See the section on External Controllers for more info!)

THE EVENT EDITOR

Unless you're a real pro, and you have a buffer length of zero milliseconds, you'll probably find that the live recordings don't always sound exactly perfect. That's where the event editor comes in. Each time you move a wheel during a recording session, the new setting is stored as an "event" for that wheel at that moment in the loop. With the event editor, you have complete control over how the sound is tweaked during playback.

1. **Record Some Live Tweaking on a Particular Wheel.** The cutoff on the TS-404, for instance. Let's assume you already did that in the previous section. If you prefer you can look at the event editor for the INS Cutoff Wheel in **GettingStarted1.flp** for either the Ins_Round or Ins_Square sample.

2. **Stop Fruity and Open the Event Editor.** Right-click on the wheel you modified, and select **Edit Events** from the pop-up menu. The screen you are looking at now is a lot like the Graph Editor described earlier. One difference is that this graph controls the level of a single wheel or slider at a particular point in the song. (OK, it's actually more complicated than that. Remember how we told you to keep all your live recording in a single pattern (Pattern 2) and place this pattern once at the beginning of a song? If you do that, then the bars in the Event Editor will match the bars in the Playlist. If you don't do that, you're on your own!) The other main difference is that this graph is used to set **Events** (bright vertical lines corresponding to the value of the wheel you are setting) that persist until the next event.


Edit menu
Edit mode selection
Play Indicator
Mouse Cursor Shows Edit Mode
Events - Ins_Round saw - Filter cutoff frequency
Events
(Each sets the level until the next event)

3. **Event Editor Modes.** The event editor has four modes, which are explained below.

    a. **Draw Mode.** In this mode, the mouse pointer looks like a pencil . You can add new single events by left-clicking in the main window. You can also left-click and drag to draw multiple events, or right-click and drag to draw a line of events.

    b. **Delete Mode.** Click on the delete symbol to change to this mode. You can delete events by clicking on them, or click and drag to delete a series of events. (The events are the bright vertical lines on the main window.)

    c. **Smooth Mode.** Click on the smoothing (interpolation) symbol to change to this mode. You can click and drag to highlight a region. When you let go of the mouse button, the events will be smoothed out, instead of looking choppy. Try it!

    d. **Select Mode.** Click on the select symbol to change to this mode. When you click and drag, you will see a red region highlighted on the Play Indicator Bar. You can also right-click on the Play Indicator Bar in any mode to expand the highlighted region. You can cut and zoom to this region from the **Edit Menu**.

4. **Miscellaneous Facts.** Here's some stuff you should know about the Event Editor.

    a. **Undo.** There is a limited form of undo available for the Event Editor. Use **CTRL-Z** to undo the last action.

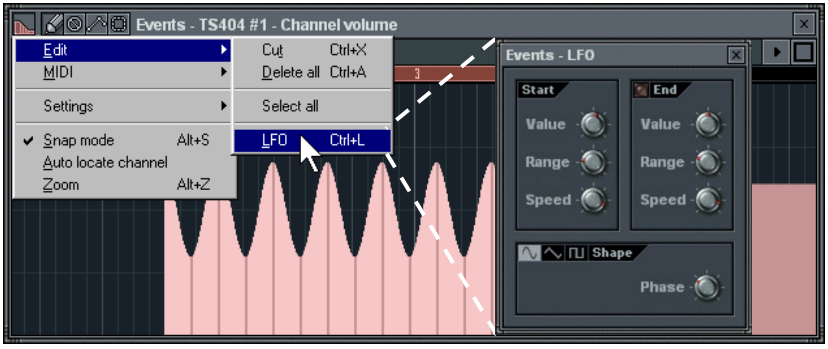
    b. **Setting the Initial Event.** You will notice that after live recording, the wheel you recorded sometimes doesn't start in a sensible place when you play back the loop. This can be fixed by turning the wheel to a good start position, and then right-clicking the wheel and selecting **Init Events With This Position**. This sets the very first event so that the wheel will always start where you want it.

    c. **Getting a Feel for It.** It takes some practice to master the event editor, and to be able to get a song to sound exactly the way you want it, but it's definitely worth it. Keep practicing until you get it right!

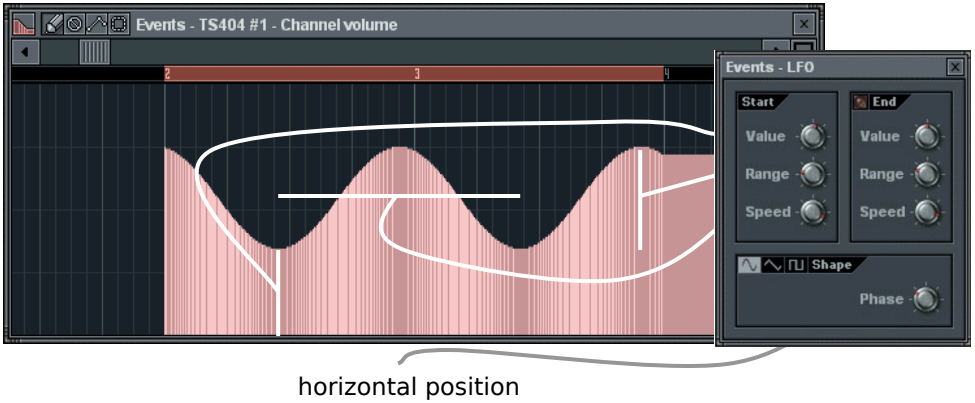
    d. **Live Recording Defeats Static Tweaking.** If a wheel has some events recorded on it, you can no longer just set it anywhere you want and expect it to stay there. You have to go through the Event Editor or start a new live recording session to change it.

5. **Introducing the Event LFO.** Earlier on, we explained how to use the **LFO** (Low Frequency Oscillation) controls on TS404 channels (it's also available for Sample Channels on the INS panel). But it's sometimes hard to control exactly how this oscillation is going to fit with the song. That problem is solved with the Event LFO, which lets you simulate the perfect oscillation inside the event editor.

6. **Using the Event LFO.** Open the event editor for some control (perhaps the Channel Settings INS Panel Cutoff for Ins_Round in **GettingStarted1.flp**). Make sure you're on the right pattern in the pattern selector (pattern 2 for **GettingStarted1.flp**). Now select an area to oscillate using Select Mode or by right-clicking on the Play Indicator Bar. Now hit **ctrl-l** or select **LFO** from the **Edit Menu** . This will pop up the **LFO Settings** window and immediately apply the LFO to the selected area. See below for an example.



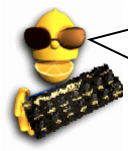
7. **Play with the Main LFO Settings.** Notice the dialog has three sections. If you play with the controls in the **Start** and **Shape** sections, you should be able to create all kinds of cool effects. In the **Start** section, you can alter the **value** (height), **range** (depth), and **speed** (length) of the waves. In the **Shape** section you can alter the shape of the wave (sine wave, saw-tooth, or square) and the **phase** (basically moves the waves left and right.)



8. **What About the *End* Section?** If you want to make the LFO change as it progresses, turn on the **End** section by pressing the red button. Once the light is on, you can modify the parameters for the beginning (left) and end (right) of the LFO, and Fruity will smoothly morph the settings from start to end. This lets you create really cool changing LFO effects like below. In the picture, a square wave LFO starts at bar 2 and ends at bar 4. As the LFO progresses, the speed increases and the value and range decrease from their Start to their End values.

9. **What Else is in the Edit Menu?** In the Edit Menu you can also delete all events (**Edit→Delete All**), select all events (**Edit→Select All**), and change the color and look of the editor (**Settings**). You can also turn **Snap** on and off. Use Snap to make sure your highlighting and event placement is always right on a beat or bar. The grain of Snap can be changed on the main toolbar (see below). Try the different settings to see how it effects highlighting and event placement The finest grain is **Tick**, which will cause you to snap to extremely fine-grained locations between notes. If you select **Auto**, then Fruity will decide for you where the best snap location is.

Snap Toolbar



Time for more tips

You can undo an LFO with Ctrl-Z.

If you record tempo changes, the delay line for the TS-404 will automatically be reset at every change. The delay lines for the sample channels will not, but the delay length will change with the tempo, making it sound a little weird at first.

THE PIANO ROLL

You may have already realized that there are some things that the Step Sequencer doesn't do very well. It gets tricky to use when you have melodies that are longer than 1 bar. It's also tricky if you want to use a single-note sample to play chords. Finally, it's nice to be able to slide notes like on the TS404, but you can't do that with any other type of channel. The Piano Roll solves all of those problems!

1. **Open the Piano Roll Editor.** Load up **GettingStarted6.flp** and select pattern 3. Notice that the Step Sequencer view is very different. That's because the Ins_Round and Ins_Square channels contains Piano Roll data instead of normal dots. You can open the **Piano Roll Editor** for either channel either by **right-clicking the channel name** or by **left-clicking the Mini Piano Roll**. Open it for the Ins_Round channel.

Right Click Here
(Channel Name)

Left Click Here
(Mini Piano Roll)

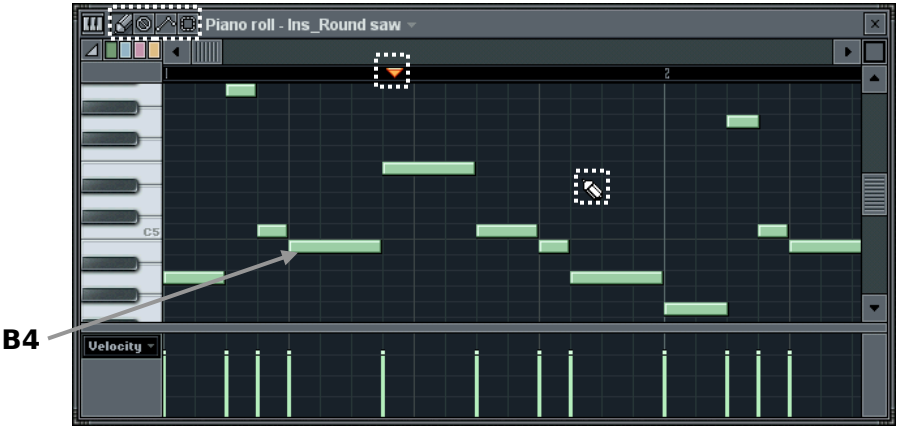
2. **What You're Looking At.** First thing to notice is that this screen looks a little like the Event Editor. See the **Play Indicator Bar**, the **Edit Mode Buttons**, and the **Edit Menu Button**? But the "events" in the Piano Roll are notes to be played at the given location, rather than level settings for various Fruity controls. Each horizontal green line shows where a note should start and end, and the **Piano Keyboard** on the left shows the pitch of each note. The note labeled below is a B-4 (B in the 4th octave) which will start on the second beat of the first bar and play for 3/4 of a beat.

Edit Mode Buttons

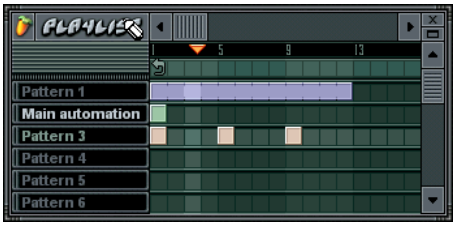
Play Indicator

Edit Menu

Mouse Cursor

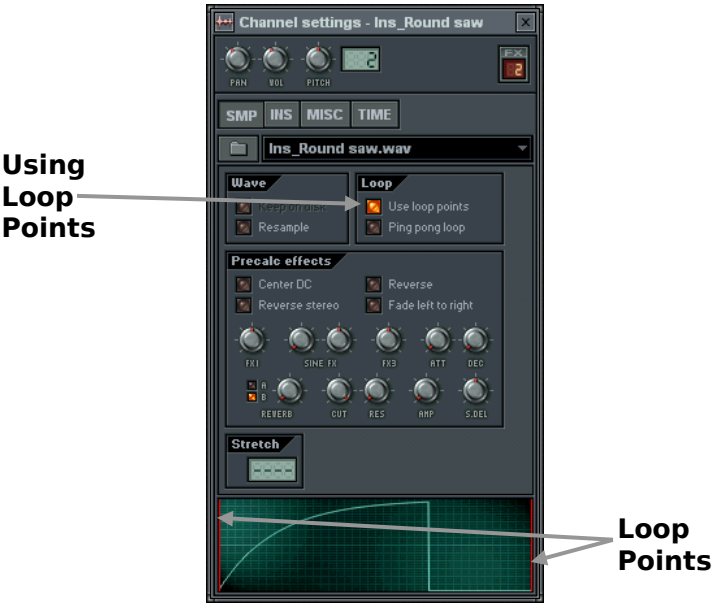

Piano roll - Ins_Round saw
C5
Velocity
B4

3. **Check Out the Playlist.** Like the Event Editor, the Piano Roll can extend beyond a single pattern (bar). In this case, both the Ins_Round and Ins_Square Piano Rolls have been programmed with 4-bar melodies. So in the Playlist, you see pattern 3 triggered once every 4 bars.



4. **Important Advice.** Before we go any further, here's a tip. Make sure you always keep your Piano Roll patterns separate from your regular patterns. You'll just avoid a lot of confusion that way. You don't have to do it this way, of course, but even the simple song in **GettingStarted6.flp** would not have been possible if we had merged patterns 1 and 3. For homework , see if you can figure out why that is!

5. **What Kinds of Channels Can Have Piano Rolls?** You can have a Piano Roll for any type of Generator except TS404 (it works beautifully with any of the other Synths though). But there's something you should know about **Sample Channels**. You can use the Piano Roll on any Sample Channel, but it will always work best when you are using **Looped Samples**. Ins_Round, for instance, contains loop points that let the sample play over and over again to create a smooth sound that lasts as long as you want. If you don't have a looped sample, you can still use the Piano Roll, but your notes may not actually last as long as you wanted them to.



6. **Basic Piano Roll Editing.** Here's a run-down of how to edit your melody line.

   a. **Entering Notes.** This can get a little tricky. To enter a note, make sure you're in Draw Mode by clicking the **Draw Mode Button** (see the Event Editor section), click on the canvas, and drag the note to where you want it to start. If the loop is not playing, you should hear the note you are entering as you drag it around. The length of the note will match the length of the last note you placed. To change the length, grab the right hand side of the green bar and drag it.

   b. **Note Snap.** You may find the note snaps to a place you didn't want it to go. If so, change the **Snap Level** on the main toolbar the same way as you did for the Event Editor (see previous section). Sometimes you just can't get the

note length to snap where you want no matter what you do. In this case, shrink the note to the left as far as you can and then drag it out to the right again. This often fixes the problem.

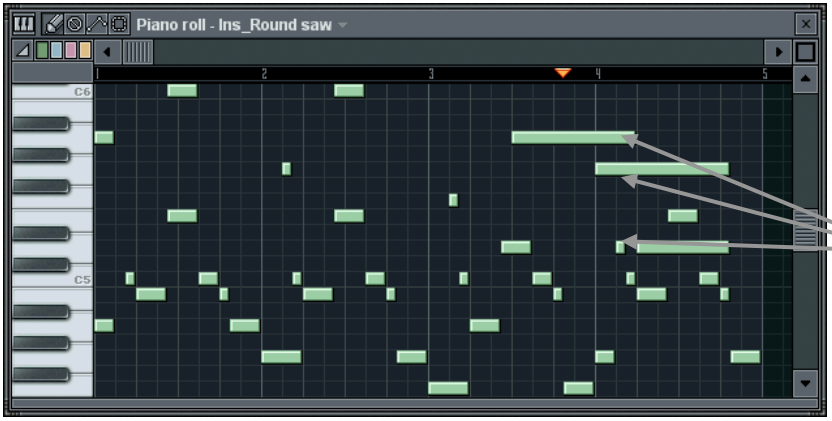
c. **Note Color.** See the row of 4 colored buttons under the Edit Mode Buttons? These let you select the color of the notes you enter. This may seem foolish right now, but color-coding can really help you out when you're trying to make sense of the notes you entered. Plus, the Edit Menu lets you **Select By Color** so you can Delete or Copy and Paste only those notes.

d. **Deleting Notes.** Two options here - either **right click** the note you want to delete or go into Delete Mode with the **Delete Mode Button** (see the Event Editor Section).

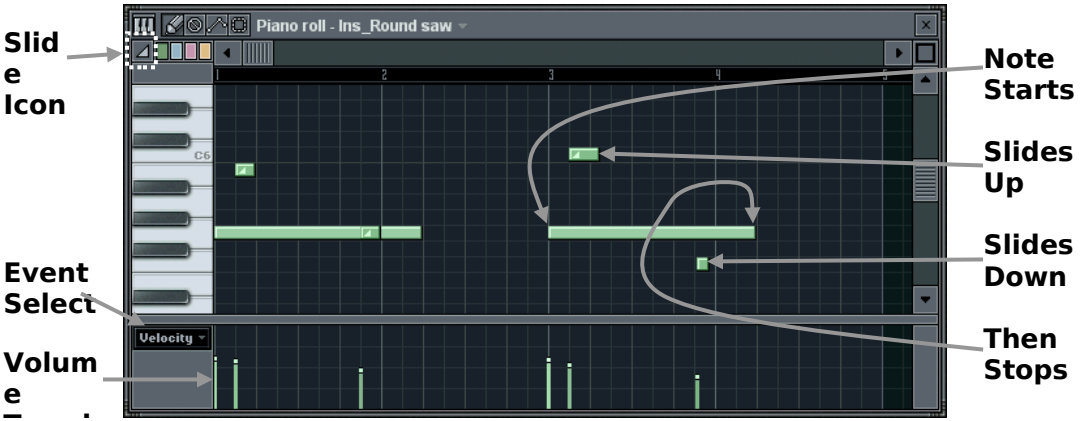
e. **Undoing Changes.** Like the Event Editor, there is a limited undo available from the **Edit Menu** or by pressing **Ctrl-Z**.

f. **Cutting, Copying and Pasting Notes.** Go into Select Mode with the **Select Mode Button** (see Event Editor section) and click and drag to highlight some notes. Then use the **Cut**, **Copy** and **Paste** options in the Edit Menu or use **Ctrl-C**, **Ctrl-X**, and **Ctrl-V**. Pasting can get a little tricky, though. The notes will paste to their identical locations in the first bar that is currently displayed on the screen. So to paste from bar 1 to bar 2, select the notes in bar 1 and hit Ctrl-C to copy, then scroll over to bar 2 and hit Ctrl-V. If the notes don't appear, they probably went into bar 1. Press Ctrl-Z to undo and try again.

7. **Chords and Harmonies.** One of the really nice features of the Piano Roll is that you can have notes sound on top of each other to create chords and harmonies. Here, we're getting into sophisticated stuff that you need some kind of musical intuition for, but Fruity does make life a little easier by giving you a **Chord** option on the **Edit Menu**. Select the type of chord you want, and then go into **Draw Mode**. You can now drop entire chords onto the canvas. **GettingStarted7.flp** is an example of a polyphonic melody. The picture below is the Ins_Round Piano Roll after zooming in on the entire Piano Roll.

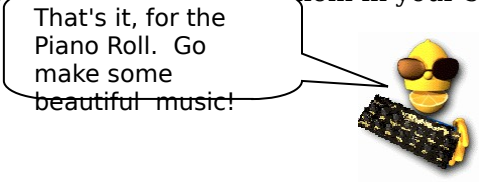

Piano roll - Ins_Round saw
C6
C5
Overlapping Notes

8. **Pitch-Bending Notes.** This is really cool. If you click on the **Slide Icon** in the top left just under the Edit Menu Button, you can insert pitch-bending notes (also called **Slide Notes**). To see how this feature works, place a long note on the canvas, and then place a slide note above or below it. Make sure the two notes overlap. The long note will play until it reaches the slide portion. Then the pitch will rise towards the Slide Note and stay there until it reaches the end of the original note. The longer the Slide Note, the longer the slide. In **GettingStarted8.flp**, we've added another Ins_Round Piano Roll in pattern 4 that uses slides. Check it out.



9. **Tweaking the Notes.** Remember the Graph Editor from way back in the Step Sequencer section? It let you individually change Volume, Cutoff, Resonance and so on for each note. The Piano Roll has a similar function, laid out in the bottom part of the Piano Roll Editor. Every time you enter a note, you get a spike in the bottom graph that shows the level of the parameter selected by the drop down box on the left (labeled **Event Select** above). After you enter the notes, you can change the values of any of the parameters by grabbing the top of the spikes and dragging them. **GettingStarted8.flp** has volume tweaks in the Piano Rolls for both pattern 3 and 4. You can set **Velocity** (=Volume), **Pan**, **Cutoff**, and **Resonance**. As an added bonus, you can also use this graph as the Event Editor for Channel Pan, Pitch, and Volume.

10. **Importing MIDI Tunes.** In the **Edit Menu** under **MIDI**, you'll find two methods of importing MIDI sound files directly into the Piano Roll Editor. There are tons of MIDI files for various popular melodies floating around out there. Now you can suck them directly into Fruity Loops and use them in your songs. How cool is that?



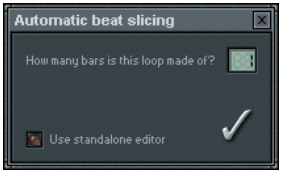
THE BEATSLICER

In yet another awesome fruity team-up, you can now import beats sliced up into separate drum hits using the **BeatSlicer**. This is really handy if you're into breakbeats. If you have not registered the BeatSlicer separately, you will have to make do with the low quality mono sound of the shareware version. But you can still get a good idea of the awesome power of the software this way. Here's how you do it...

1. **Select Import→Beat to Slice** from the **File** menu.

2. **Select a Beat.** The first thing you'll be asked to do is select a wav file to slice. Make sure it's at least a 1 bar (1 pattern long) beat. You can slice a file that's not a beat, but it won't work very well...

3. **Set the BeatSlicer Parameters.** After you've selected the beat, you'll get the dialog box shown below. First select the number of patterns (bars) you want the beat to span by clicking and dragging. If you want the beat sliced and imported directly into Fruity Loops, hit the check mark. If you want to use the BeatSlicer editor, check Use Standalone Editor first. (The editor has it's own help system to explain things.)



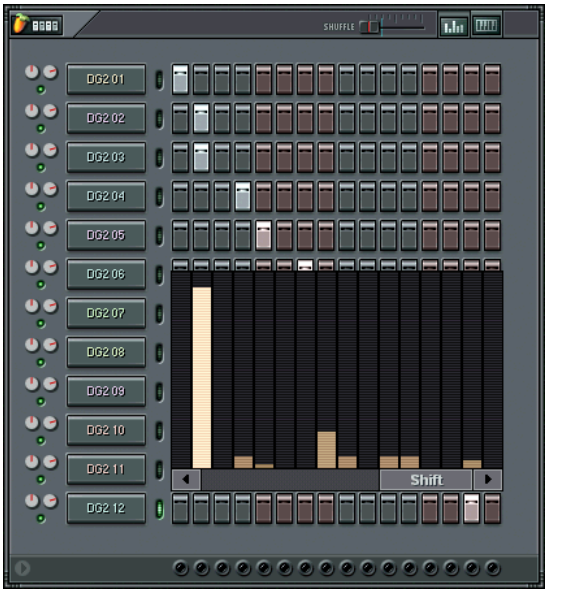
4. **Store the Sliced Beat.** Next, a dialog will ask you to select a directory to store the sliced up pieces of the original beat file. The default is the Fruity Loops **Sliced Beats** directory.

5. **Save Changes to your Loop.** This process drastically alters the current loop, so the next dialog asks you if you want to save it before continuing.

6. **To Merge or Not To Merge.** Final question - do you want to merge the beat with the current project? If you say yes, one channel per sliced up beat will be added to the end of your channel list, and the beat will be inserted into the first few patterns of your song. Because of this, you should probably insert some blank patterns at the start of the song before you slice. You can do this with **ctrl-shift-insert** in either the Playlist or the Step Sequencer.

7. **Weirdness.** You should also know that the BeatSlicer considers a bar to be 16 dots, regardless of how many dots you have per pattern. So if your patterns are 32 dots wide and you select to merge with the current loop, selecting 1 bar in the dialog above will put the beat into the first half of the first pattern.

8. **The Final Result.** Below is a picture of what a sliced beat looks like in Fruity. Note that the tempo is automatically chosen to match the tempo of the original beat. Also, since no beat ever quite fits exactly onto the notes, Fruity has used the shift function (see the graph editor pane) to match the beats exactly. Now rearrange the beat for funky breaks!

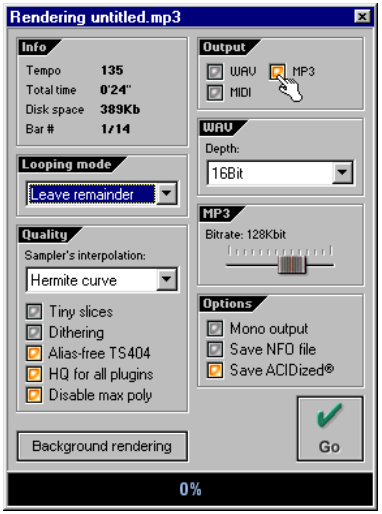


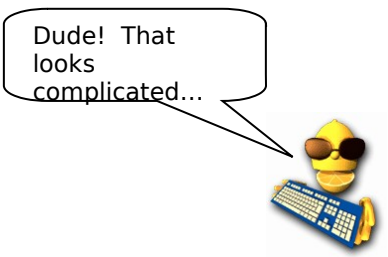
Importing ReBirth RB-338 Songs. You might have noticed this option in the Import Menu... This feature allows you to open a ReBirth song, configure it to Fruity Format, and listen in Fruity Loops. Of course, it's not a perfect conversion - see the pop-up window for details about what parts of the song might not be converted properly. The playlist and pattern layout also needs some explaining. The first 32 patterns are TB303 #1. The next 32 are TB303 #2. Then you have 32 patterns for the TR808 and another 32 for the TR909 for a total of 128 patterns. Of course most of these will probably be blank for any given song, so your song ends up pretty spread out, but it's all there if you hunt for it.

SHARING YOUR WORK

So now you're done with your song – you probably want to bring it out of Fruity Loops so you can put it on a CD, post it on the internet, or edit it in another program. The **Export** function exists for this purpose. Here's how to use it.

1. **Export to Wav or MP3**. This option is available from the **File** menu. Whether you choose Wav or MP3, you will be asked to specify the name of the file and then the dialog below will appear. There's a lot to choose from here, and we're not gonna go into it. If you want an explanation of every button, go to the on-line help under **File Formats**. It's all there. If you want to just get your song rendered, leave the settings the way they are (trust us - we picked the defaults for a reason!)





2. **Should I Use Wav or MP3?** Wav is a raw sound file format. Huge files, excellent sound quality (expect to use about 10 MB per minute depending on **Depth**). Wav files are suitable for burning onto CD. MP3 is a compressed format. Smaller files, but sound quality may be slightly compromised (expect to use about 1 MB per minute depending on **Bit Rate**). If you want to share files on the internet, MP3 is the way to go.

3. **Should I Use "Background Rendering?"** Rendering can take a long time and hogs the CPU, especially if you choose the high-quality options in the **Quality** section of the window above. But if you click on Background Rendering, Fruity

will iconify itself and continue to render unobtrusively in the background. It takes longer, though.

4. **Exporting to a Zipped Loop Package.** This feature is useful if you want to transmit your Fruity Loops files over the web. It takes your Fruity Loops file, plus all the samples used in that files, and puts them into one zip file.

5. **Where Can I Put My Songs?** There are a number of places on the web where artists can place their music in MP3 format for free. **www.mp3.com** is probably the best known site, but it's easy for an amateur looper to get buried there in all the high-profile commercial stuff. **www.traxinspace.com** is an option if you are more interested in feedback from other musicians. The site is a musical community with people like you reviewing every song that is placed on the site. It's a great way to get feedback. If you don't like either of these options, you can always create your own site using one of the many free hosting services out there. Good luck!

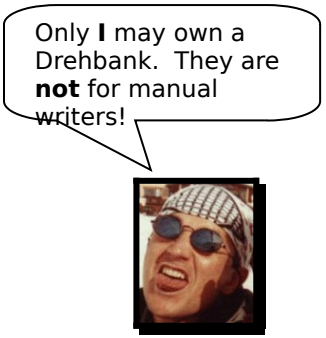
THE PHATBOY AND OTHER MIDI CONTROLLERS

An External MIDI Controller is kind of like a big fancy joystick to control the wheels and switches in Fruity Loops. The main difference is that you have to tell Fruity ahead of time what you want each knob on the controller to do (a minor inconvenience for the luxury of changing both cutoff and resonance at the same time!) Each knob on the controller can be linked to a different wheel or slider on Fruity Loops. If you have a controller, this section will tell you how to make it work with Fruity. If you don't have one, get one! First we'll introduce a few of the more popular controllers, and then we'll tell you how to set them up.

1. **A Few Examples of MIDI Controllers.**

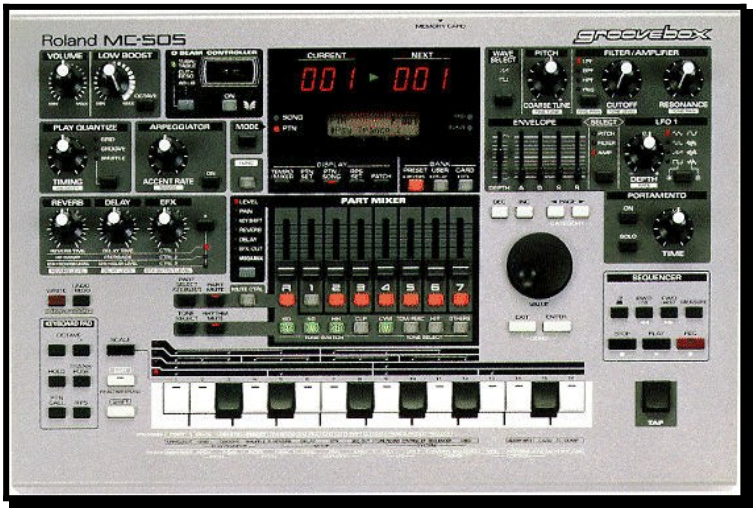
   a. **The PhatBoy.** The PhatBoy is one of the most affordable (hence most popular) MIDI controllers, made by KeyFax at **www.keyfax.com**. It's small, with only 13 knobs, but that's as big as most people will ever need (you've only got two hands!).

b. **The DrehBank.** Another popular choice is the DrehBank from Doepfer at **www.doepfer.de**. This baby gives you 64 knobs instead of 13!



♥The Boss♥

c. **The MC-505.** The MC-505 by Roland (www.rolandgroove.com) is a lot more than a MIDI controller. It's a hardware synthesizer and sequencer specially built to replicate classic techno sounds like the TB-303, TR-808 and TR-909. But it also has full MIDI controller capabilities, so you can link some of the knobs to Fruity controls.



2. **Setting Up Your Controller.**

   a. **Get a MIDI Cable and Plug in your Controller.** Look on the back of your computer. If you see two or three round, 5-pin connectors labeled "MIDI", then you're in business. If not, look for a 15-pin trapezoidal joystick port. If you have the round connectors, you need a cable to go from "MIDI Out" on your controller to "MIDI In" on your computer. If you only have a game controller connection, you'll need a special cable that has two round MIDI plugs at one end and a trapezoidal plug at the other. Both these types of cables should be available at any music store specializing in keyboards and synthesizers (but if you ask for them in a computer store, you may just get blank looks.)

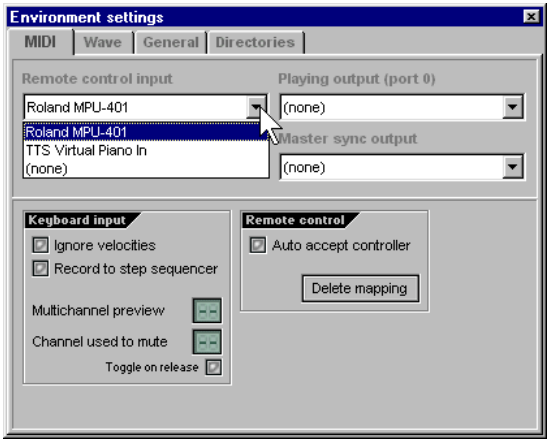
   b. **Turn on the Controller and Start Up Fruity Loops.** If you have a PhatBoy, make sure the power switch is set to mode "III". If you have a DrehBank, hold down the "Bank 1" button when you plug in the power cable. For the MC-505, make sure the MIDI mode is set to MODE 2 (Shift 12, Edit TxRx = Mode2). Try turning the knobs on your controller. If everything is ok, you should see a little red "Midi" light flash beside the Hint Bar of Fruity Loops every time you turn a knob. If that works, great! You can skip steps c to e. If not, read on my friend.

   c. **Enable MIDI Remote Control.** Check the **Options** menu to see if there is a check mark beside **MIDI Remote Control**. If not, click on it and see if you get the light now. If not, read on.

Sam: Yo, check it out. I need a cable with MIDI connections on one end and a joystick plug on the other.

Computer Store Guy: What's *mee dee*?

d. **Set Your MIDI Input Device.**
If the light is still not coming on when you turn knobs on your controller, go into **MIDI Settings** (from the **Options** menu or by hitting **F10**). Check out the **Remote Control Input** box. If you see the word "none" there, then you've got to select an input. Typically, you will be presented with a number of choices, and you'll just have to try them all to figure out which one is right.



e. **Troubleshooting Checklist.** If the red light is still not coming on when you turn the knobs on your controller, here's a list of things you should check.

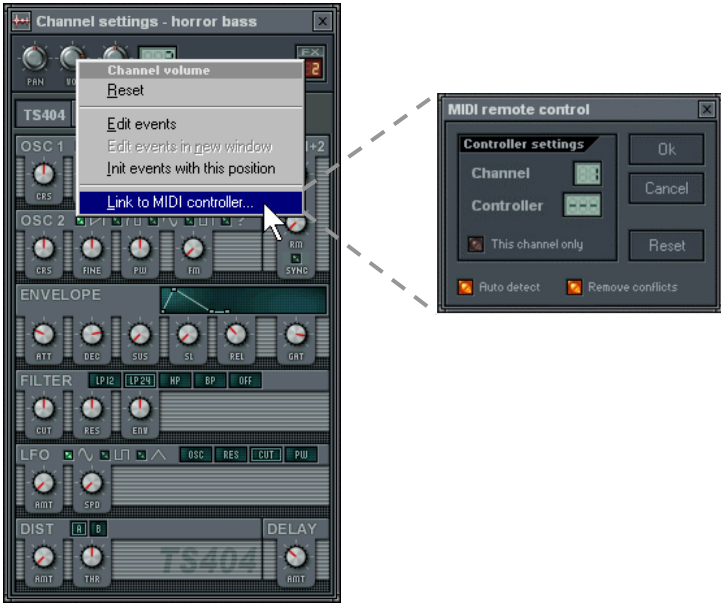
- Did you select the correct PhatBoy or DrehBank mode in step b?
- Did you enable "MIDI Remote Control" in step c?
- Did you select the correct MIDI input in step d?
- Are your MIDI In and Out cables reversed?
- Did you plug the controller into a power outlet?

If your Midi controller seizes up on ya... Try this as a last resort: quit Fruity, then select **Programs→Fruity Loops→Advanced→Reset settings** from the Windows **Start** menu. Then relaunch Fruity and try again...

Jaha

3. **Linking a Fruity Wheel to Your Controller.** OK, load up any loop you have that uses the a TS-404 channel. **GettingStarted4.flp** might be a good one to start with.

   a. **Right-click on the Control You Want to Link to the MIDI Device.** In this case, we're trying the main volume control on a TS404. Now click on **Link to MIDI Controller**, to pop up the **MIDI Remote Controlling** window.



   b. **Turn a Knob on Your Controller.** You should see the **Channel** and **Controller** numbers change. Now click **OK**, and turn the same knob. You should see the volume control turn back and forth and hear the volume of the instrument change. You're in business!

   c. **Set the Buffer Length as Low as You Can.** Earlier, we explained the buffer length slider (get to it by hitting **F10** and clicking the **Wave** tab). This slider determines the delay time between you turning a knob and the sound of Fruity changing. So you want to set it low. But if you set it too low, the sound will become choppy. So try to find a happy medium. If you can't get it low enough to do what you want, then I guess you need a faster computer. Sorry, dude.

4. **Which Controls Can I Link?** Pretty much all of them, actually. For reference, though, it's the same set of controls that can be changed in **Live Recording**. Again, if you want to know whether a control can be linked externally and live recorded, mouse over it and look for the two red dots in the Hint Bar. That's it. Happy looping!

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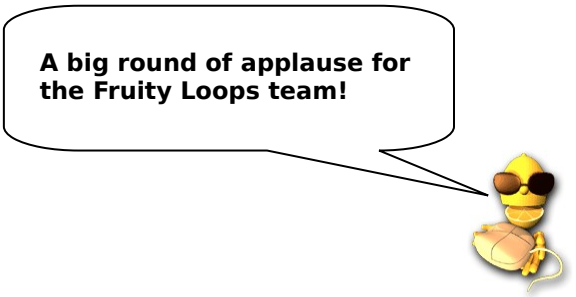

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